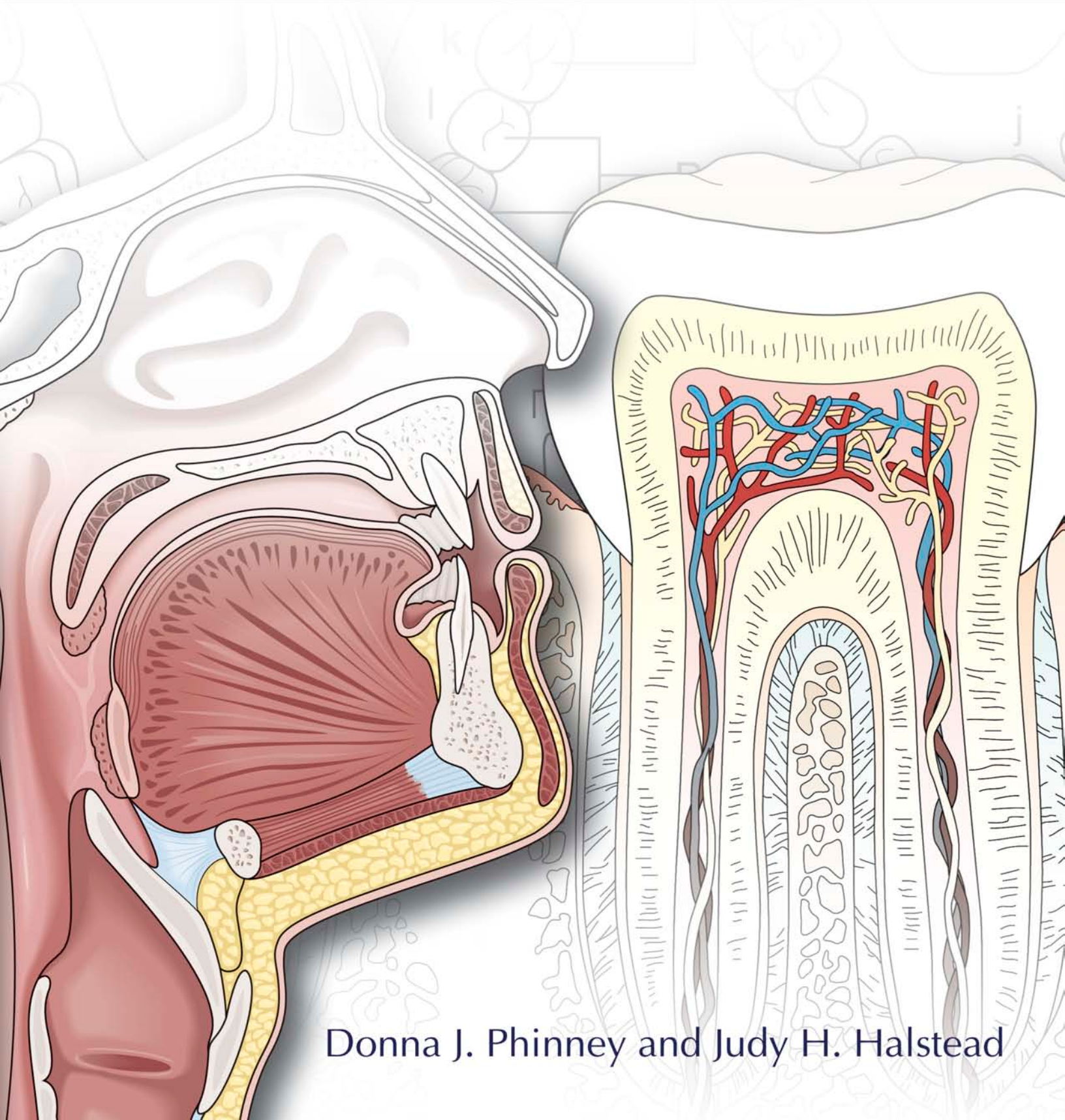


DENTAL ASSISTING COLORING BOOK



Donna J. Phinney and Judy H. Halstead

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DENTAL ASSISTING COLORING BOOK

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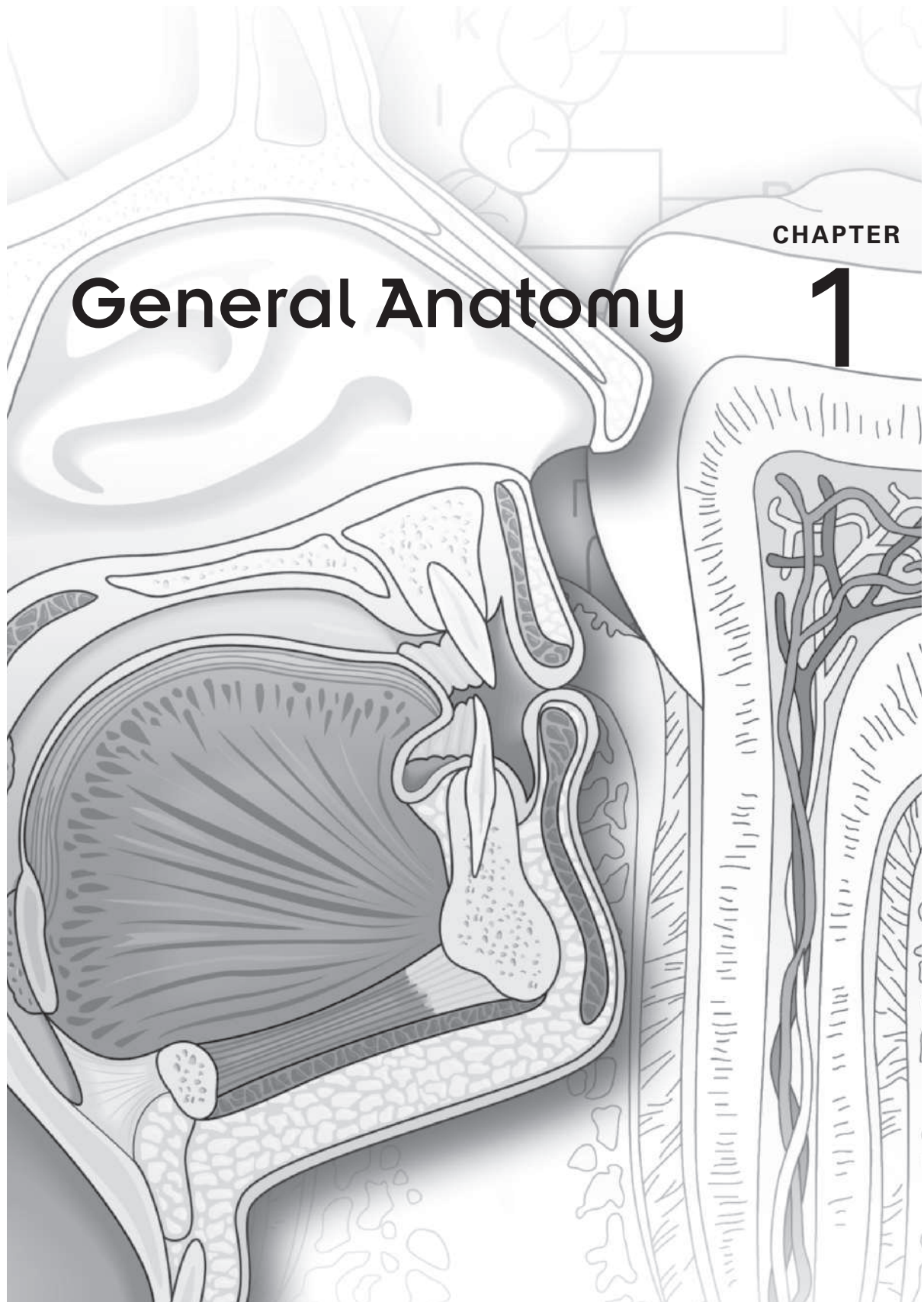
Table of Contents

Chapter 1	General Anatomy	1
	Basic Cell Structures	2
	Body Planes	4
	Body Directions	6
	Body Cavities	8
	Axial and Appendicular Skeleton	10
	Anatomic Features of the Bone	12
	Skeletal Joints	14
	Types of Muscle Tissue	16
	Tendons and Ligaments	18
	Structure of a Neuron	20
	Simple Reflex Arc	22
	Structures of the Endocrine System	24
	System and Pulmonary Circulation	26
	Structures of the Heart	28
	Structures of the Digestive System	30
	Salivary Glands and Ducts	32
	Structures of the Respiratory System	34
	Structures of the Bronchi	36
	The Lungs	38
	Tonsils	40
	The Immune System	42
Chapter 2	Head and Neck Anatomy	45
	Landmarks of the Face	46
	Structures of the Oral Cavity–Maxillary View	48
	Structures of the Oral Cavity–Mandibular View	50
	Landmark on the Buccal Mucosa	52
	Landmarks of the Oral Pharynx Area	54
	Landmarks of the Palate	56
	Landmarks on the Dorsal Surface of the Tongue	58
	Landmarks on the Ventral Surface of the Tongue	60
	Basic Taste Buds of the Tongue	62
	Salivary Glands and Ducts	64
	Lateral Aspect of the Cranium and Face	66
	Frontal View of the Bones of the Cranium and Face	68
	Landmarks of the Palate	70
	Lateral View of the External Surface of the Mandible	72
	Internal Lingual View of the Mandible	74
	Temporomandibular Joint (TMJ)	76
	Movement of the Temporomandibular Joint (TMJ)–Hinge Joint	78
	Movement of the Temporomandibular Joint (TMJ)–Gliding Joint	80
	Muscles of Mastication–Lateral View	82
	Muscles of Facial Expression	84

Extrinsic Muscles of the Tongue	86
Muscles of the Floor of the Mouth	88
The Hyoid Bone.	90
Muscles of the Soft Palate	92
Muscles of the Neck	94
Nerves of the Maxillary Arch	96
Medial View of the Branches of the Pterygopalatine Nerve.	98
Mandibular Nerves.	100
Arteries of the Face and Oral Cavity	102
Veins of the Face and Oral Cavity.	104
Chapter 3 Tooth and Tissue Structures	107
The Three Primary Embryonic Layers.	108
Embryology	110
Developing Embryo with Primary Layers Identified	112
Facial Processes Shown on an Embryo (Child and Adult)	114
Development of the Palate.	116
Bilateral Cleft of the Lip (Alveolar Process and Primary Palate).	118
Life Cycle of the Tooth	120
Enamel Rods	122
Tissues of the Tooth.	124
Enamel	126
Dentin	128
Pulp.	130
Cementum	132
Tooth and Surrounding Tissues	134
Sharpey's Fibers and Cementum	136
Periodontal Ligaments and Alveolar Crests	138
Cross Section of Mandibular Molar Tissues of the Tooth Identified	140
Gingival Fiber Groups	142
Periodontium.	144
Alveolar Mucosa	146
Chapter 4 Tooth Anatomy	149
Adult Dentition	150
Deciduous Dentition.	152
Primary Dentition	154
Permanent Dentition.	156
Primary Teeth.	158
Permanent Dentition.	160
Permanent Dentition.	162
Permanent Dentition.	164
Permanent Dentition.	166
Anatomical Structures	168
Anatomical Landmarks	170
Anatomical Landmarks	172
Maxillary Central Incisors	174
Maxillary Lateral Incisors	176
Maxillary Canine.	178
Maxillary First Bicuspid (Premolar).	180
Maxillary Second Bicuspid (Premolar)	182
Maxillary First Molar	184
Maxillary Second Molar.	186

Maxillary Third Molar	188
Mandibular Central Incisors	190
Mandibular Lateral Incisors	192
Mandibular Cuspids	194
Mandibular First Bicuspid (Premolars)	196
Mandibular Second Bicuspid (Premolars)	198
Mandibular First Molar	200
Mandibular Second Molar	202
Mandibular Third Molar	204
Mixed Dentition of a Seven- or Eight-Year-Old	206
Contact and Embrasure	208
Deciduous Maxillary Teeth	210
Deciduous Mandibular Teeth	212
Identification of Teeth	214
Eruption Dates for Primary Teeth	216
Exfoliation Dates for Primary Teeth	218
Chapter 5 Dental Charting	221
Universal Numbering System	222
International Standards Organization Numbering System	224
Palmer Numbering System	226
Charting Example #1	228
Charting Example #2	230
Charting Example #3	232
Charting Example #4	234
Charting Example #5	236
Charting Example #6	238
Charting Example #7	240
Charting Example #8	242
Charting Example #9	244
Charting Example #10	246
Chapter 6 Introduction to the Dental Office and Basic Chairside Assisting	249
Small Dental Office Blueprint	250
Sterilizing Area	252
Laboratory Area	254
Dental Treatment Room	256
Operator's Mobile Cart	258
Air-Water Syringe	260
Activity Zones	262
Chapter 7 Basic Chairside Instruments and Tray Systems	265
Parts of an Instrument and Different Shanks	266
Instruments with Black's Three-Number Formula	268
Instruments with Black's Four-Number Formula	270
Chisels, Hatchets, and Hoes	272
Gingival Margin Trimmers and Angle Formers	274
Excavators	276
Explorers, Periodontal Probe, and Cotton Pliers	278
Cement Spatulas and Burnishers	280
Condensors, Carvers, and Plastic Filling Instruments	282
Parts of a Bur and Shanks	284
Cutting Bur Shapes and Number Ranges	286

Diamond Burs, Finishing Burs, Surgical Burs, and Laboratory Burs	288
High- and Low-speed Handpieces and Attachments	290
Double Color coding	292
Triple Color coding	294
Color-coding for Procedure Sequence	296
Chapter 8 Anesthesia and Sedation	299
Types of Anesthetic Injections	300
Maxillary Arch Injections and Site Locations	302
Mandibular Arch Injections and Site Locations	304
Aspirating Syringe	306
Needle Parts	308
Parts of an Anesthetic Cartridge	310
Information on the Anesthetic Cartridge	312
Equipment and Supplies Needed to Prepare an Anesthetic Syringe	314
Chapter 9 Dental X-ray Film and Holding Devices	317
Electromagnetic Energy Spectrum and Applications	318
Primary, Secondary, and Leakage Radiation	320
Parts of Dental Arm Assembly	322
Tube Head, PID, and Vertical Indicator Scale	324
Tube Head and X-ray Tube	326
X-ray Tube	328
Composition of Dental X-ray Film	330
Sizes of Dental X-ray Film	332
Film Packet	334
Film Holding Devices	336
Rinn XCP	338
Processing Room	340
Manual Processing Tank	342
Chapter 10 Radiology Landmarks	345
Landmark Planes for Exposing Radiographs of the Face	346
Landmarks for the Tooth and Surrounding Tissues	348
Landmarks for the Surrounding Tissues Continued	350
Landmarks for the Maxillary Arch	352
Landmarks for the Mandibular Arch	354
Chapter 11 Miscellaneous	357
Maslow's Hierarchy of Needs	358
Food Guide Pyramid	360
Sterilizers	362
Biological Monitors, Process Indicators, and Dosage Indicators	364
National Fire Protection Association's Color and Number System	366
Appendix Answer Key	369

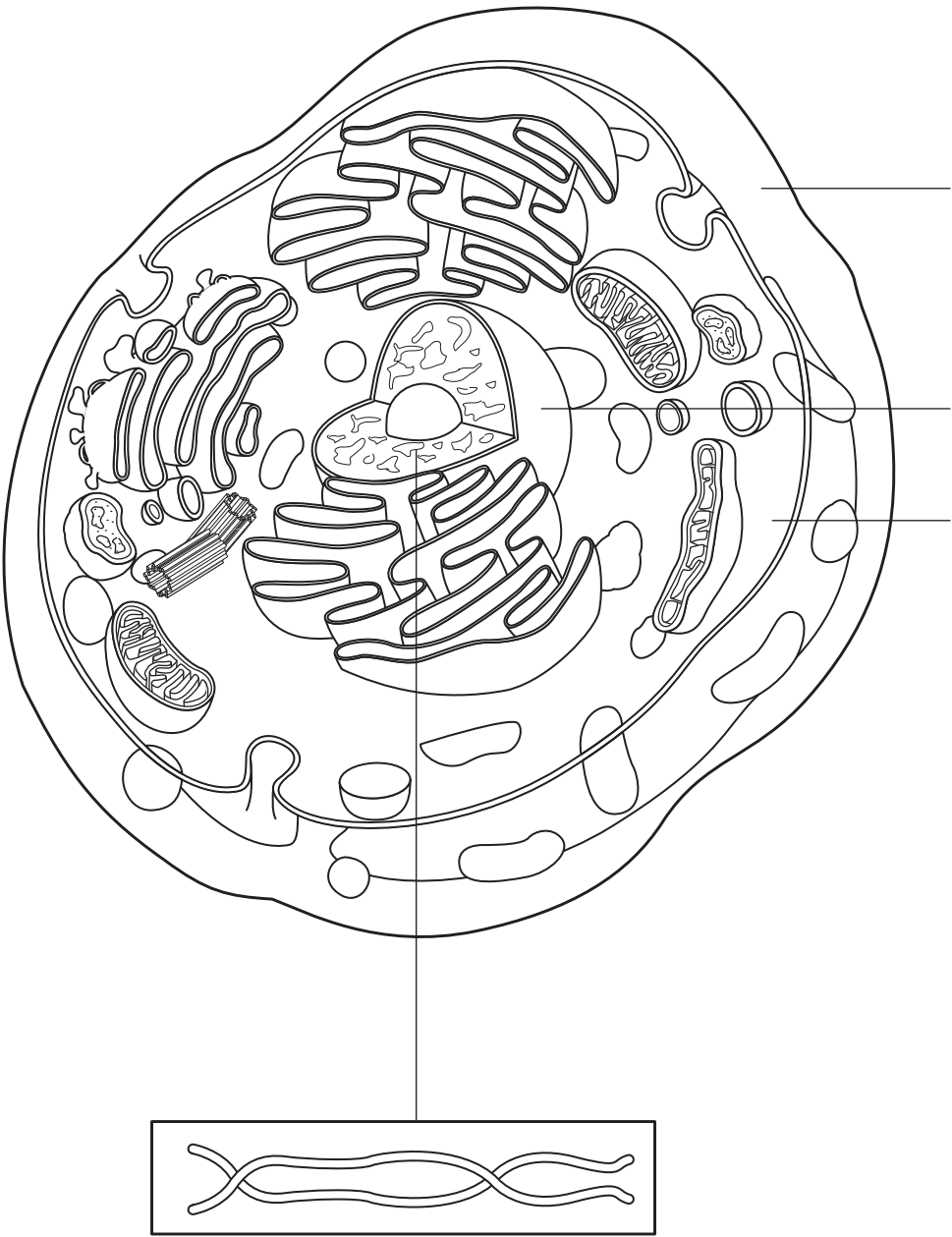


Basic Cell Structures

Label and color the structures on the illustration.

Match the structure to the definition.

- | | |
|------------------------|--|
| 1. _____ nucleus | A. the outer wall of the cell |
| 2. _____ chromosomes | B. makes up all of the substance of the cell minus the nucleus |
| 3. _____ cell membrane | C. controlling body of the cell |
| 4. _____ cytoplasm | D. contain DNA and transmit genetic information |



Body Planes

Draw the sagittal plane in black. Recall that the sagittal plane divides the body into right and left halves.

Draw an arrow to note medial or toward the midline.

Draw an arrow to note lateral or away from the midline.

Label a point on the illustration proximal to the midline.

Label a point on the illustration distal to the midline.



Body Directions

Draw a red line indicating the frontal plane. Draw arrows indicating anterior and posterior to the frontal plane.

Draw a black line indicating the transverse plane. Draw arrows indicating superior and inferior to the transverse plane.



Body Cavities

List the two sections the body cavities are divided into.

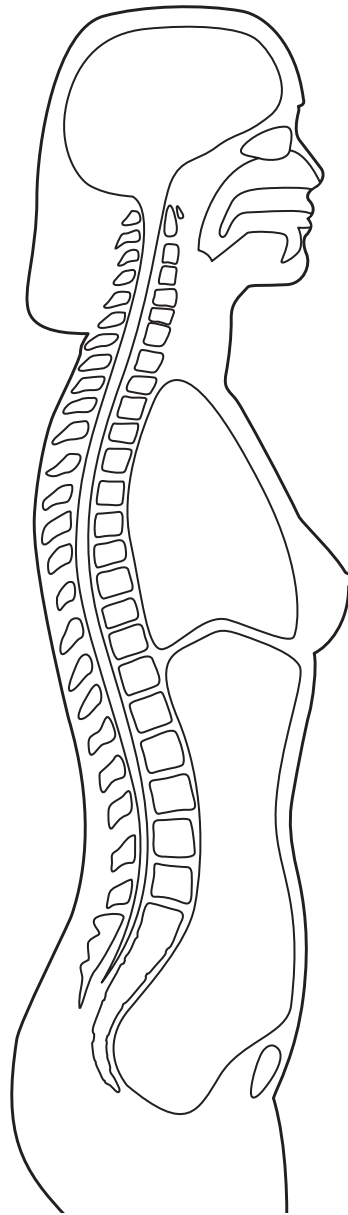
Label and color the thoracic cavity. List structures you would find here.

Label and color the abdominal cavity. List the structures you would find here.

Label and color the pelvic cavity. List the structures you would find here.

Label and color the diaphragm.

Label the parts of the dorsal cavity.

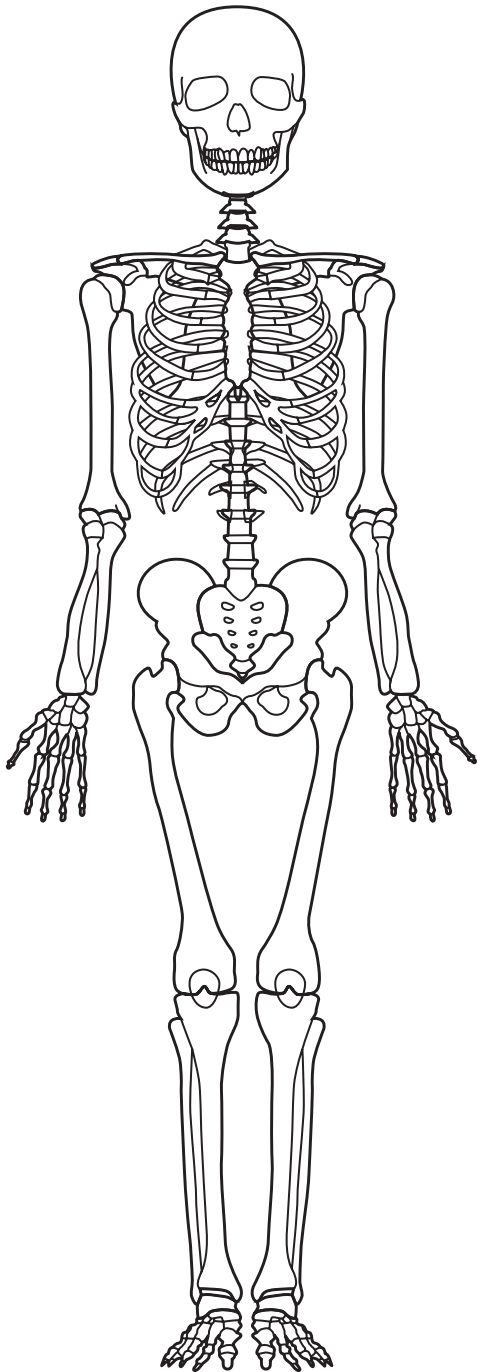


Axial and Appendicular Skeleton

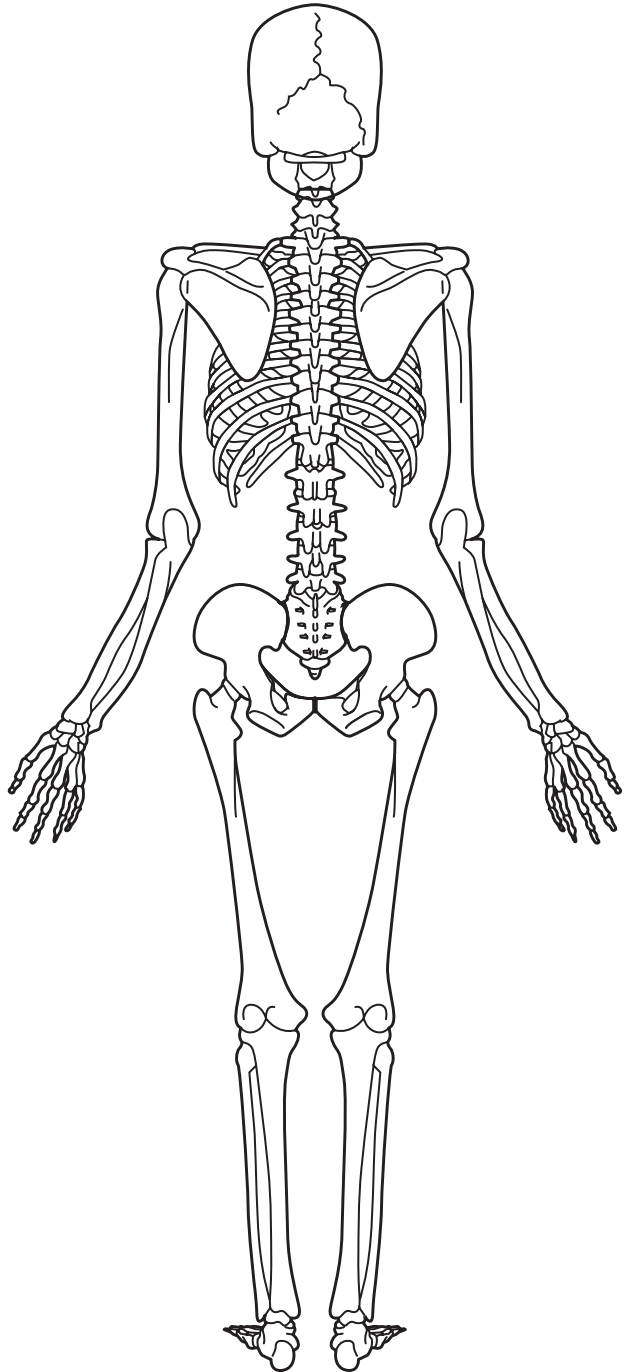
Color the axial skeleton. List and label the parts of the skeleton that make up the axial division.

Color the appendicular skeleton. List and label the parts of the skeleton that make up the appendicular division.

The hands and feet are part of what skeletal division?



Axial Skeleton



Appendicular Skeleton

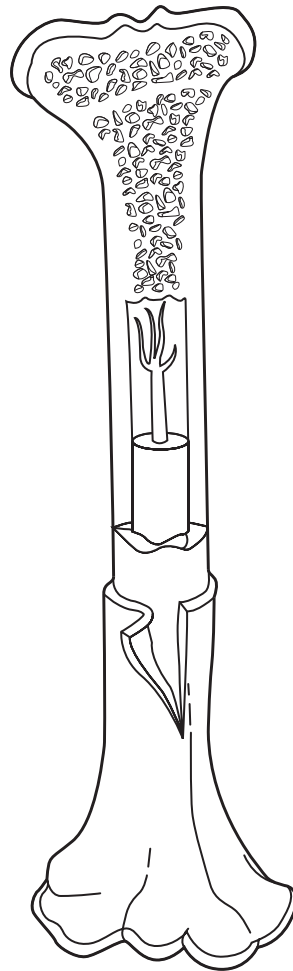
Anatomic Features of the Bone

Label the following: yellow marrow, red marrow, spongy bone, compact bone, endosteum, periosteum, artery.

Color the two different types of bone.

Color the outside and inside coverings of the bone.

What is another name for spongy bone?



Skeletal Joints

Label and color the ball and socket joint.

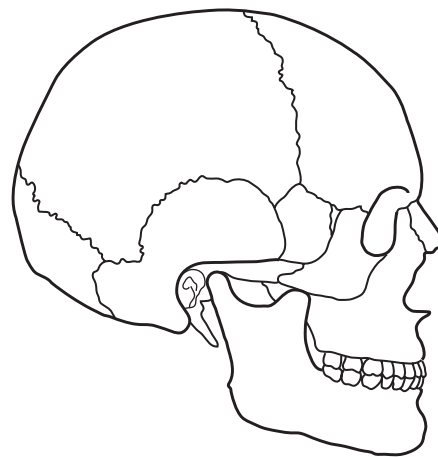
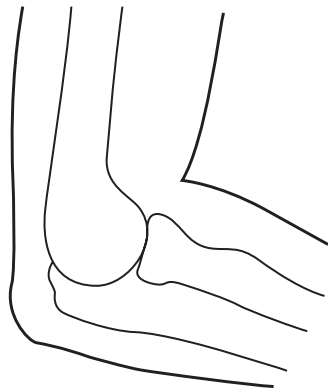
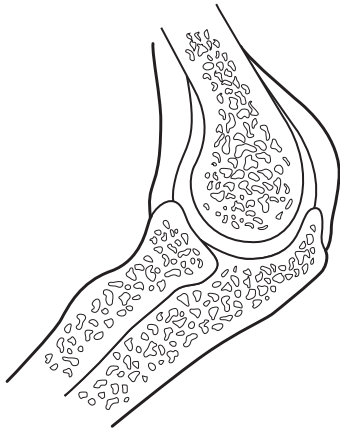
Label and color the hinge joint.

Label and color the temporomandibular joint.

Identify the synovial joint.

Another name for “joints” is _____.

The temporomandibular joint is what type of joint?

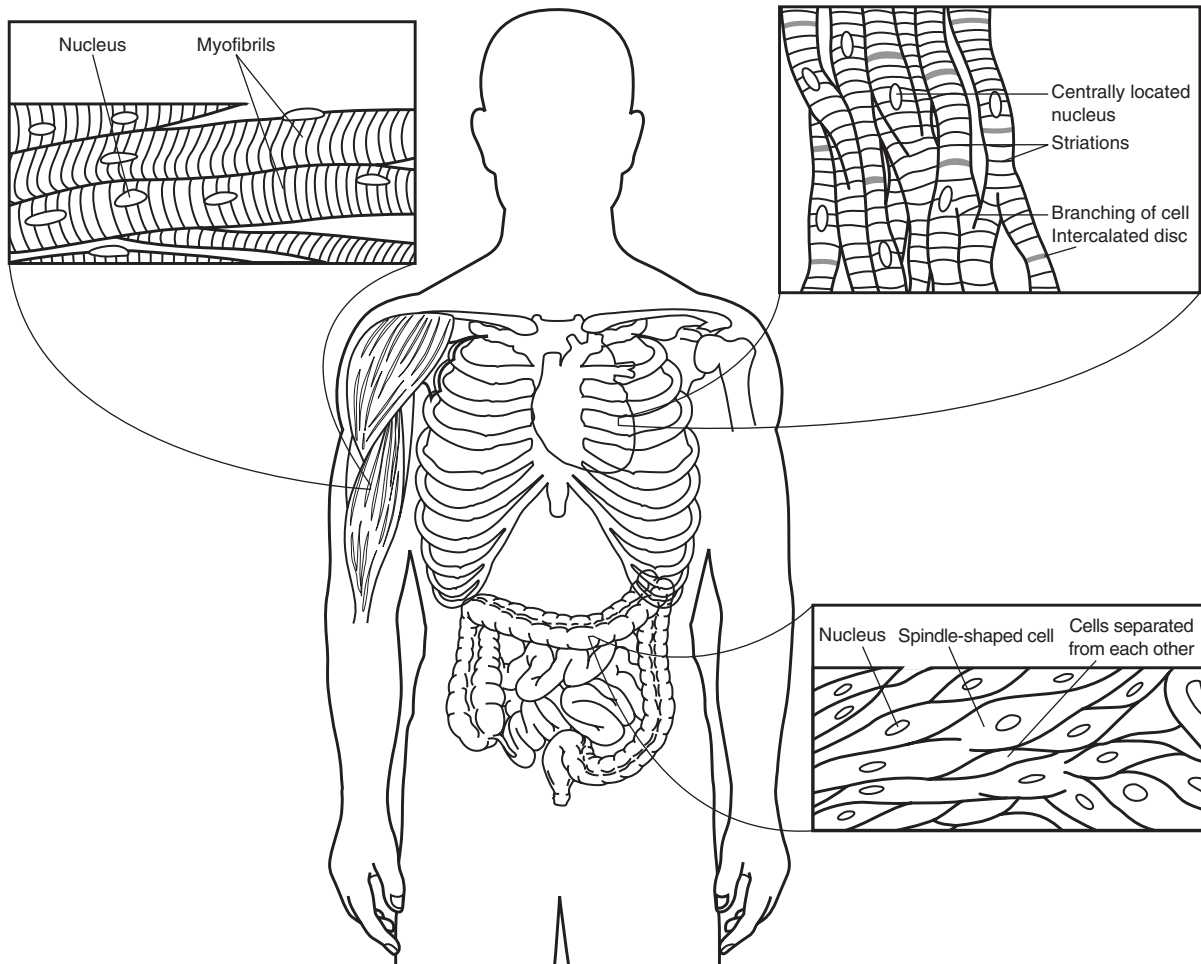


Types of Muscle Tissue

Match the type of muscle tissue to the definition.

- | | |
|--------------------------|--|
| 1. _____ cardiac muscle | A. long thin muscles that have stripes and are sometimes called “skeletal” muscles |
| 2. _____ smooth muscle | B. muscles that are not striated and are found in internal organs (except the heart) |
| 3. _____ striated muscle | C. has striped appearance but is involuntary in action |

Label and color the cardiac, smooth, and striated muscles.



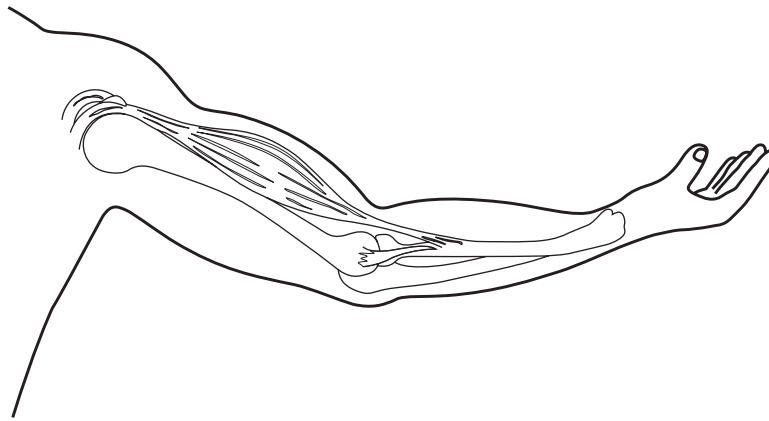
Tendons and Ligaments

Label and color the tendons.

Label and color the ligament.

_____ attach muscle to bone.

_____ attach or connect bone to bone.



Structure of a Neuron

Label and color the following: axon, beads of myelin, dendrites, nucleus, neuron cell body.

Draw an arrow on the nerve fibers that conduct impulses away from the nerve cell.

Draw an arrow on the nerve fibers that conduct impulses toward the nerve cell.



Simple Reflex Arc

Draw an arrow tracing the path of impulse through the spinal cord and back for a response.

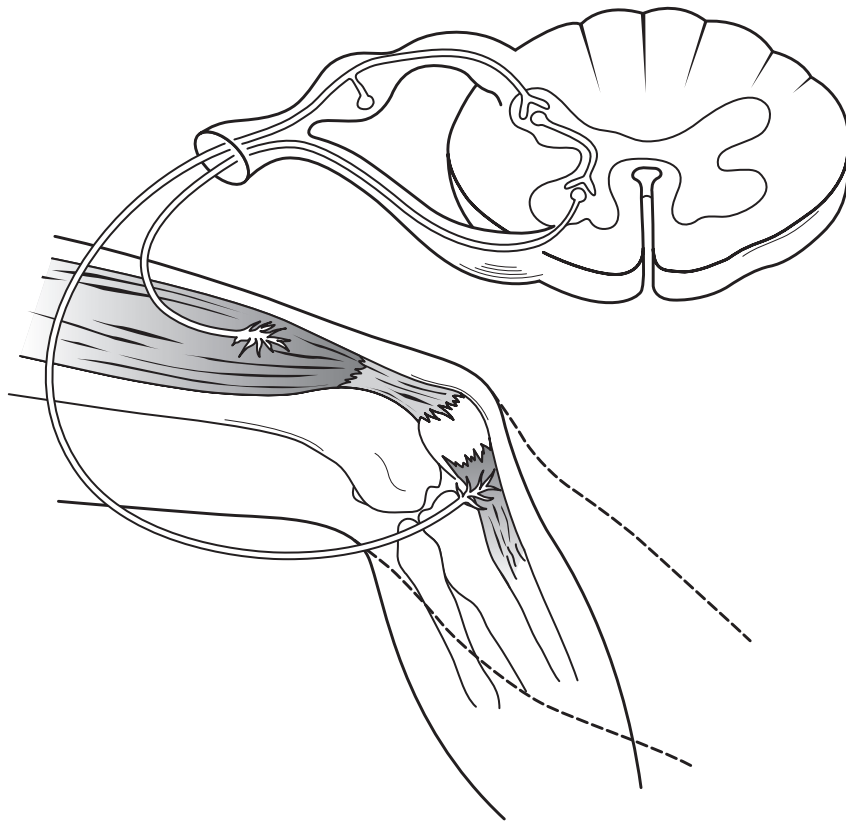
Label and color the following: axon, cell body, connecting (associative) neuron, gray matter, motor nerve ending, motor neuron, sensory nerve ending, sensory neuron, spinal cord, and synapse.

Where are the connecting neurons located? _____

- A. gray matter
- B. white matter

Mix and match:

- | | |
|----------------------------|--|
| 1. _____ synapse | A. motor nerve ending |
| 2. _____ connecting neuron | B. transmits impulses from sensory neurons to motor neurons in the CNS |
| 3. _____ effector | C. sensory nerve ending |
| 4. _____ receptor | D. nerve fibers move impulses from one cell body to another through this |

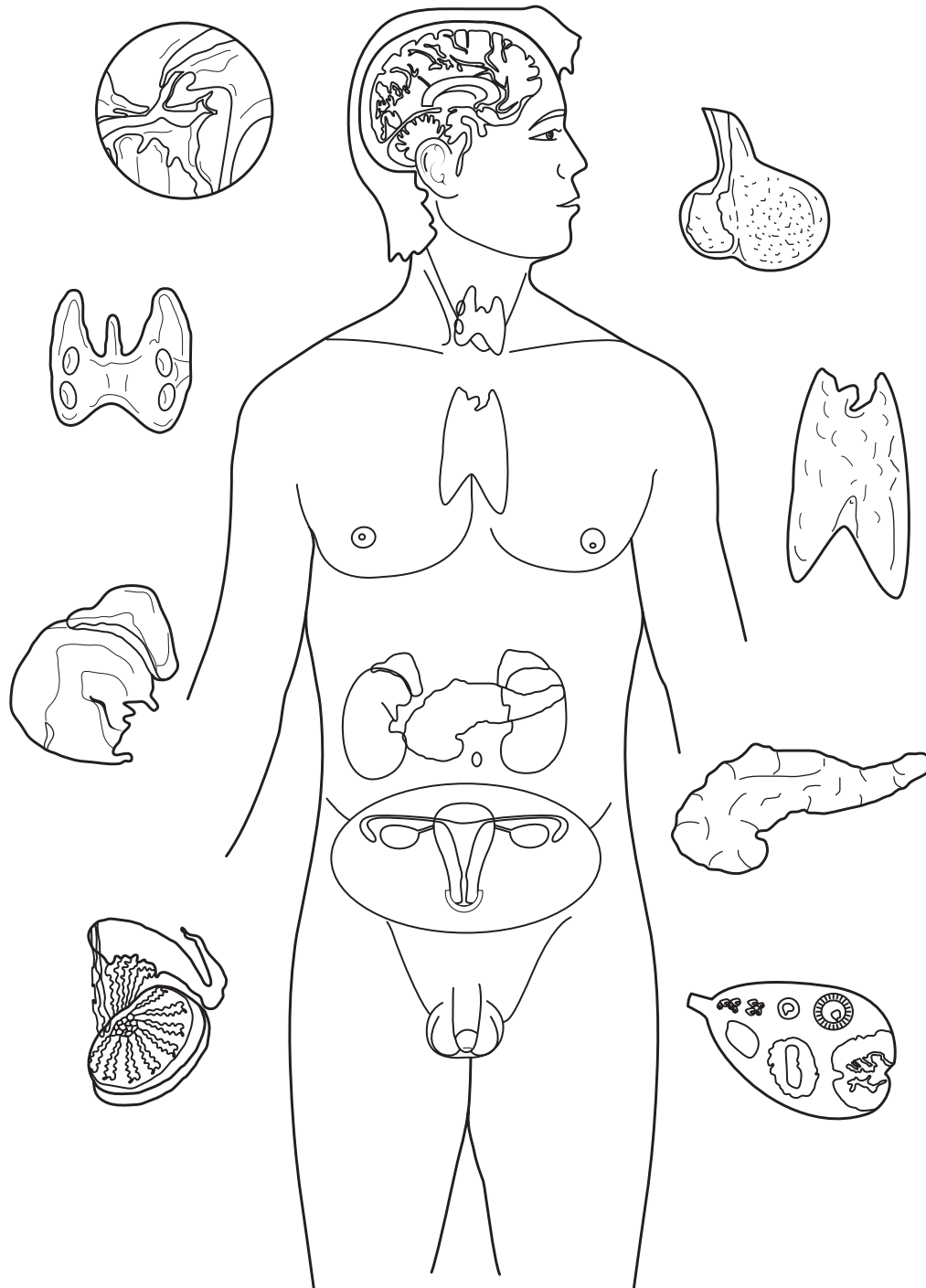


Structures of the Endocrine System

Locate, label, and color all structures of the endocrine system.

Match the structure to the function.

- | | |
|--------------------|--|
| 1. _____ adrenal | A. controls the actions of most other glands |
| 2. _____ pancreas | B. regulates stress hormones and water content of the body |
| 3. _____ pituitary | C. regulates blood glucose levels |
| 4. _____ thyroid | D. regulates blood calcium levels |



System and Pulmonary Circulation

Label the pulmonary circulation.

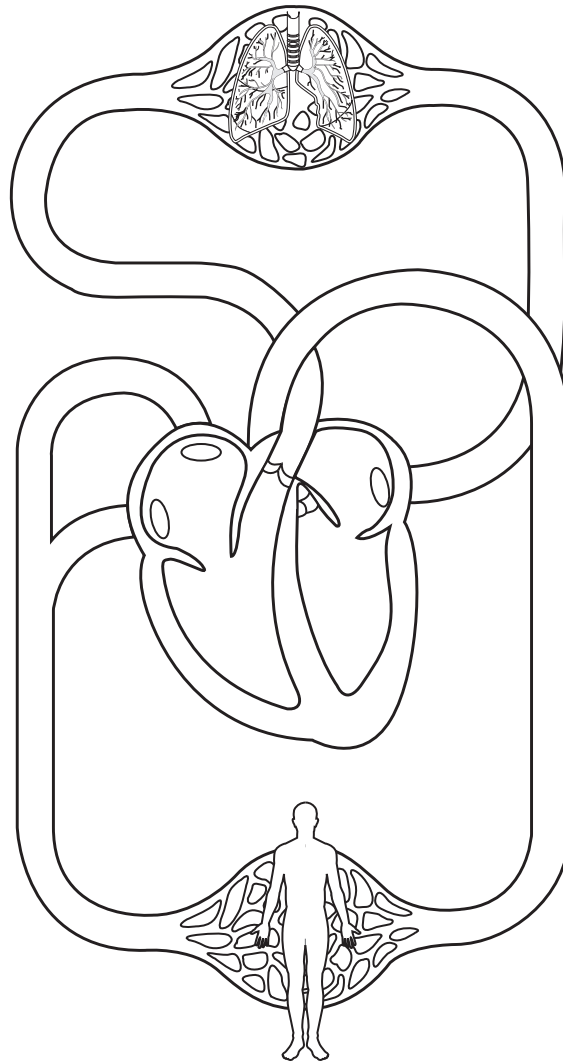
Label the systemic circulation.

Color the oxygen-poor blood blue.

Color the oxygen-rich blood red.

Draw arrows to show the complete pathway of systemic and pulmonary circulation.

- | | |
|--------------------------------|---|
| 1. _____ pulmonary circulation | A. capillary beds of all body tissues except the lungs are found in this circulation system |
| 2. _____ systemic circulation | B. capillary beds of lungs, gas exchange occurs here |



Structures of the Heart

Label and color the four valves of the heart.

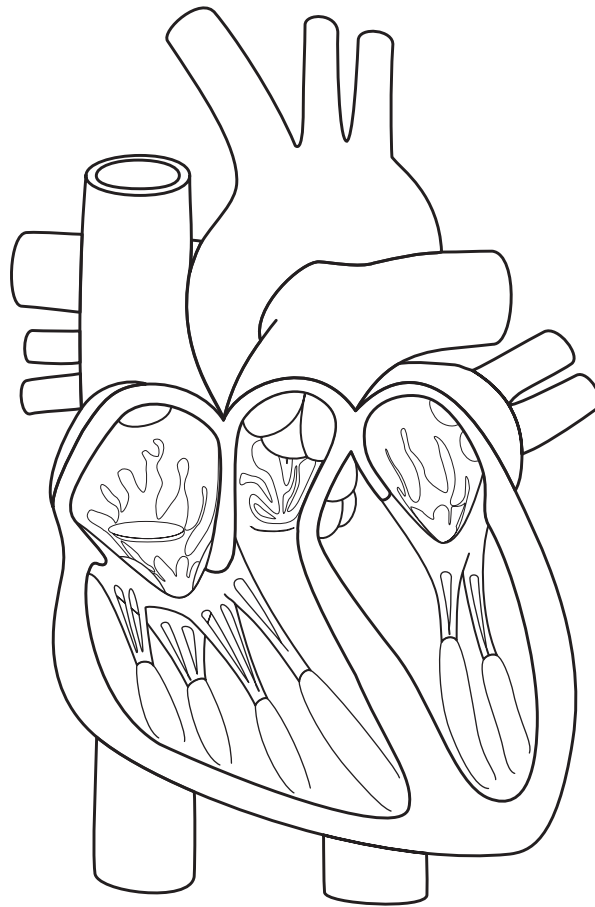
Label and color the two atriums of the heart.

Label and color the two ventricles of the heart.

Color the pathway in the heart that carries oxygen-poor blood to the lungs.

Color the pathway in the heart that carries oxygen-rich blood into the heart from the lungs and out of the heart.

1. The blood leaves the heart through the _____.
 - A. superior vena cava
 - B. aorta
 - C. inferior vena cava
2. The _____ divides the heart into left and right halves.
 - A. bicuspid valve
 - B. pulmonary valve
 - C. septum



Structures of the Digestive System

List and identify the following: large intestine, small intestine, pancreas, liver, mouth, stomach, esophagus, gallbladder, and salivary glands.

Outline and color the liver, gall bladder, pancreas, and stomach.

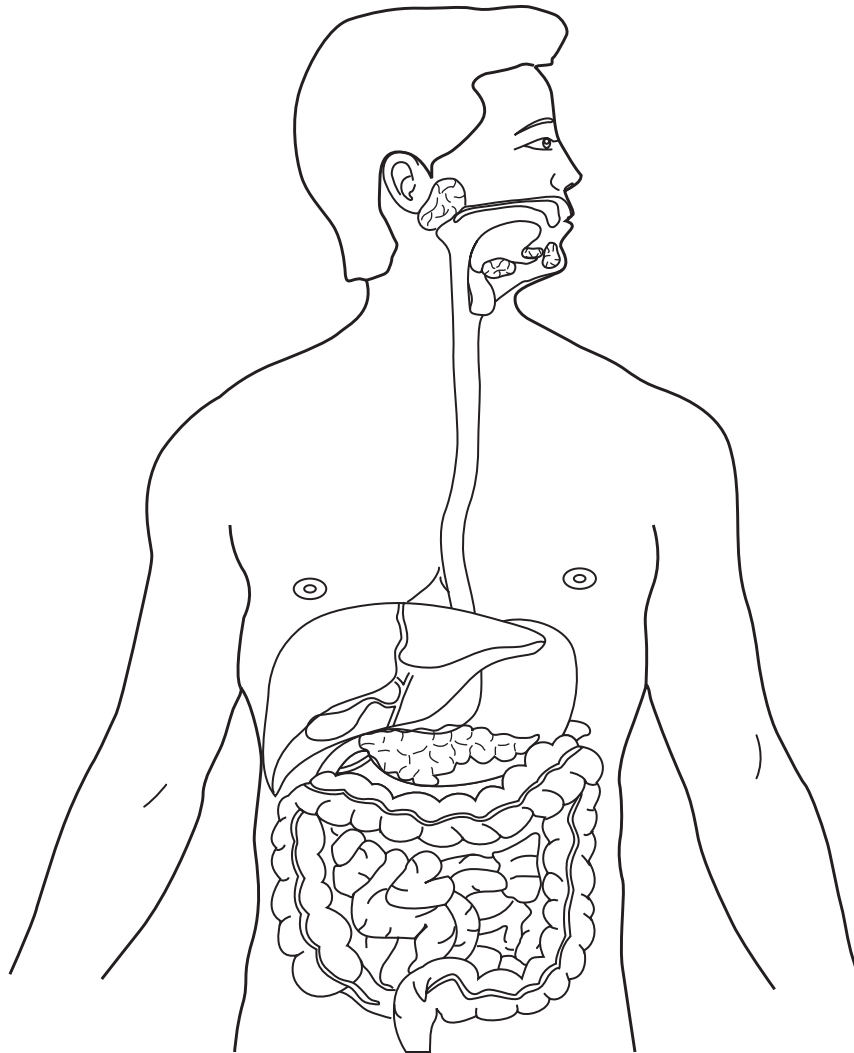
Outline and color the mouth, esophagus, and salivary glands.

Outline and color the small intestine and the large intestine.

Mix and match:

- | | |
|--------------------------|--|
| 1. _____ liver | A. stores bile and release it into small intestine |
| 2. _____ esophagus | B. absorbs water and some other nutrients, and collects food residue for excretion |
| 3. _____ large intestine | C. produces bile |
| 4. _____ gallbladder | D. connects mouth to stomach |

Draw a line following the path of food beginning at the mouth and ending at the large intestine.



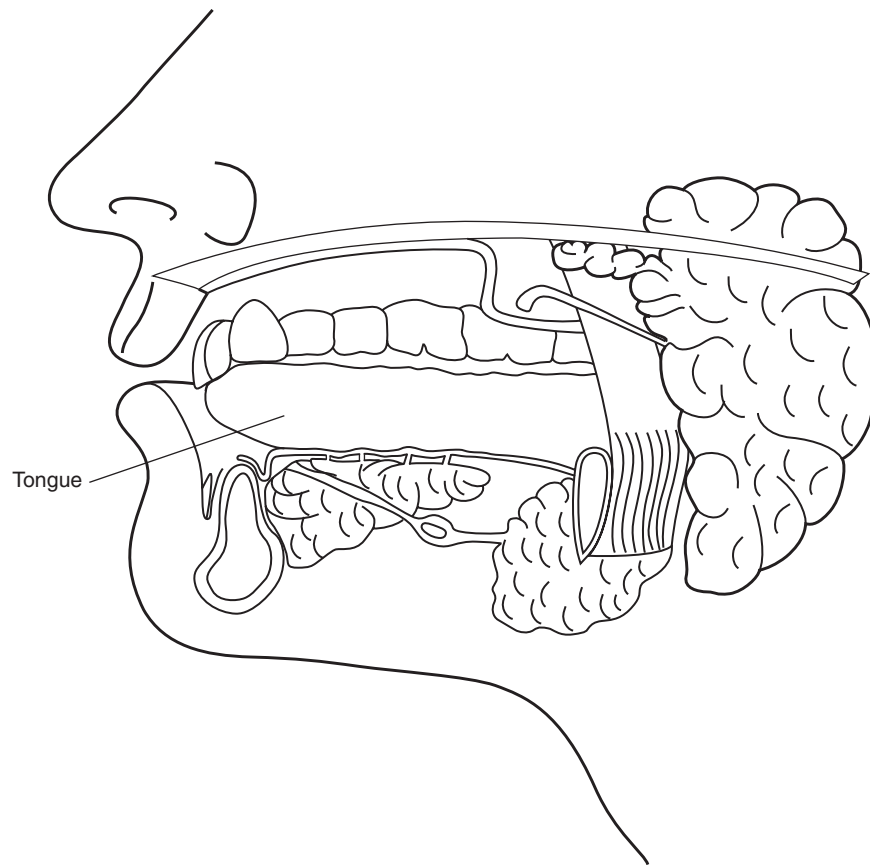
Salivary Glands and Ducts

Locate and color the parotid gland and Stensen's duct.

Locate and color the submandibular gland and Wharton's duct.

Locate and color the sublingual gland.

Describe how saliva from the sublingual gland enters the mouth.



Structures of the Respiratory System

Label and color the sinuses and nasal cavity.

Label and color the epiglottis, pharynx, larynx, and trachea.

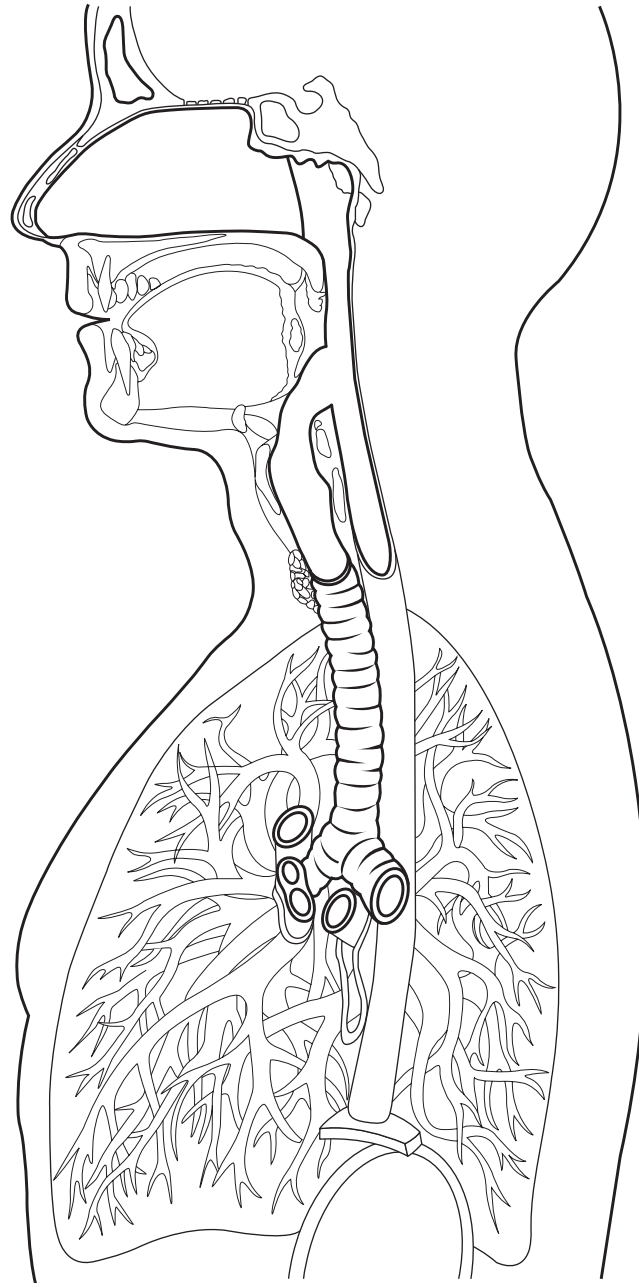
Label and color the pulmonary vein and pulmonary artery.

List the structures that make up the bronchial tree.

Another name for the larynx is the _____.

Another name for the trachea is the _____.

What covers the larynx to prevent food from entering?



Structures of the Bronchi

Label and color the bronchiole.

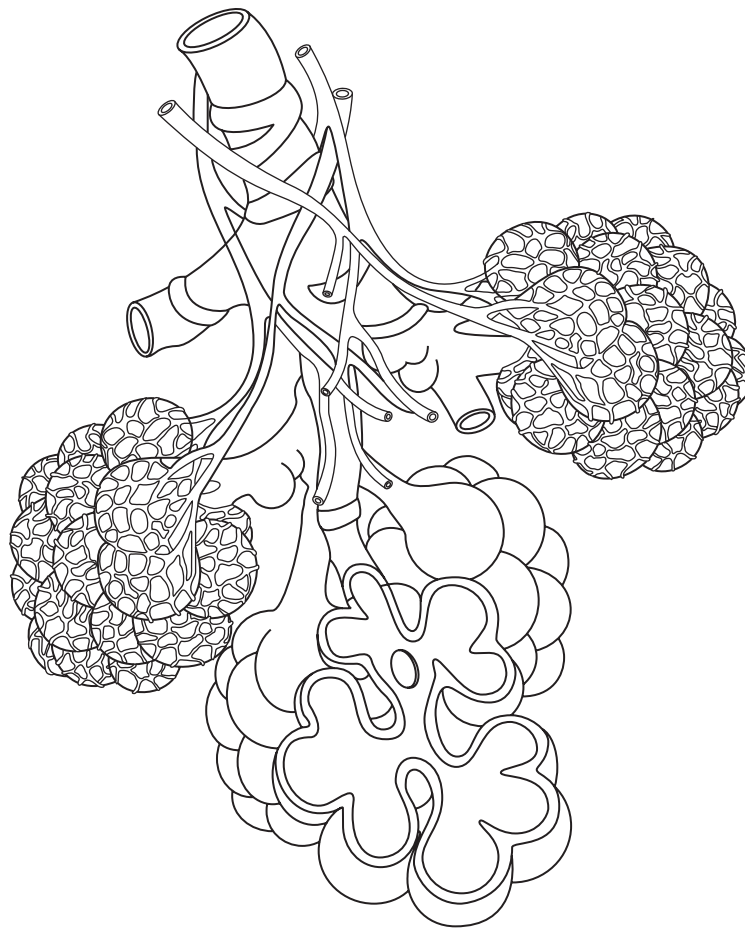
Label and color the alveoli.

Label and color the pulmonary venule.

Label and color the bronchial artery.

Where does the gaseous exchange take place?

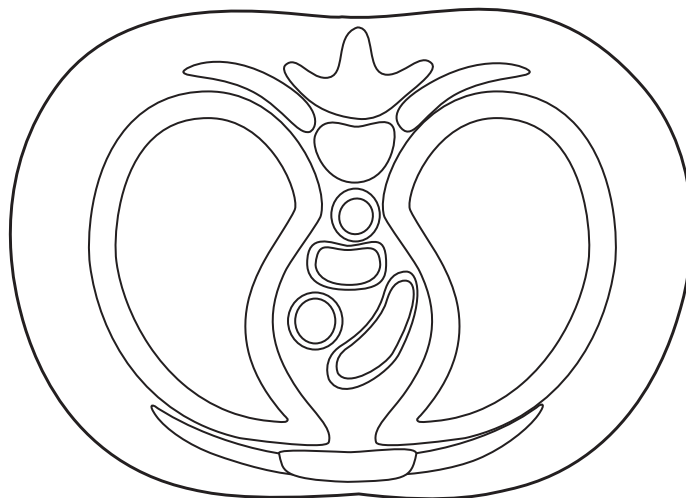
Are the bronchi smaller tubes than the bronchioles?



The Lungs

The lungs lie between what two structures when looking at this cross-section?

Label and color the following: wall of thoracic vertebrae, parietal pleura, pleural space, and the visceral pleura.



Horizontal cross section of the lungs

Tonsils

Label and color the uvula.

Label and color the hard palate and the soft palate.

Label and color the palatine tonsils, lingual tonsils, and pharyngeal tonsils.

Mix and match:

- | | |
|-----------------------------|---|
| 1. _____ lingual tonsils | A. on the posterior wall of the nasopharynx |
| 2. _____ palatine tonsils | B. on the base of the tongue |
| 3. _____ pharyngeal tonsils | C. on each side of the throat |



The Immune System

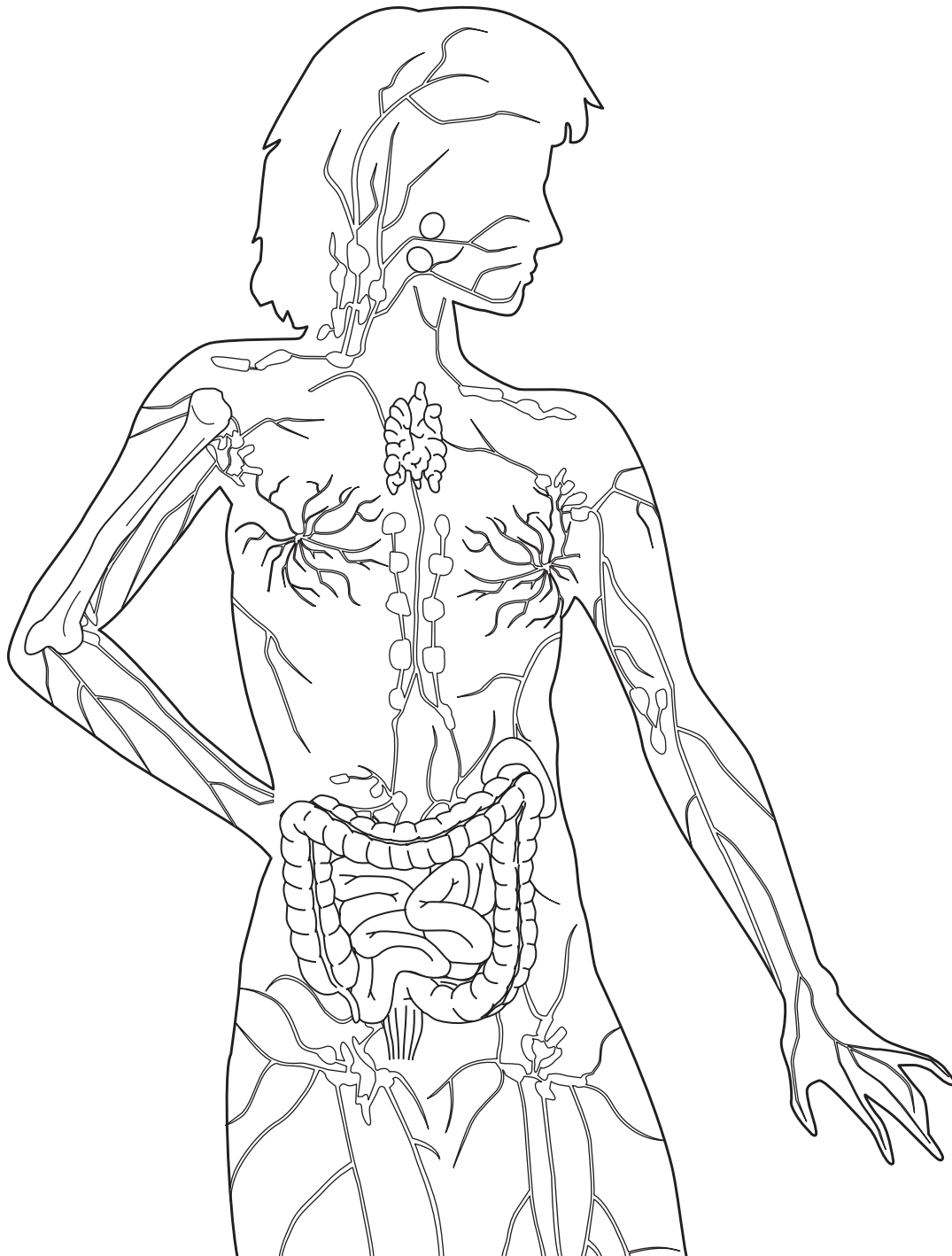
Label and color the organs from the lymphatic system.

Label and color the tissue from the skeletal system.

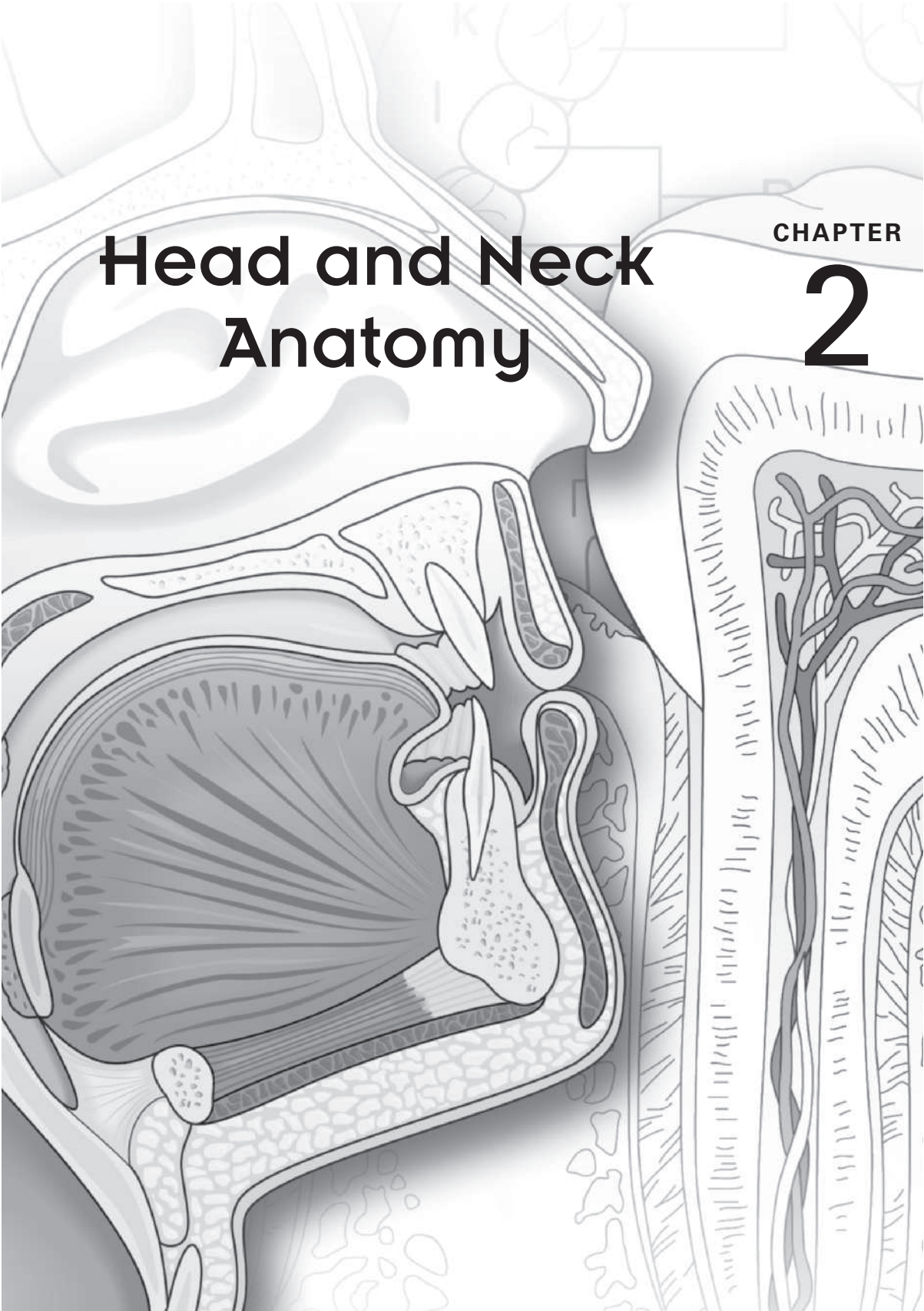
Label and color the digestive system.

1. Which is the largest lymphoid organ in the body and contains a very rich blood supply?

2. What part of the lymphatic system is found in the armpit, neck, and groin areas?



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A detailed anatomical illustration of the human head and neck in a sagittal section. The illustration shows the internal structures, including the brain, sinuses, nasal cavity, oral cavity, pharynx, larynx, trachea, and the cervical spine. The thyroid gland is visible in the neck. The illustration is rendered in a grayscale style with fine lines and shading to indicate depth and texture.

Head and Neck Anatomy

CHAPTER

2

Landmarks of the Face

Identify the landmarks on the picture, draw a circle around each landmark, and then color in each area. Landmarks include: ala of the nose, labial commissure, labiomental groove, labial tubercle, nasolabial groove, philtrum, vermillion border, and vermillion zone.

Match the structure to the definition.

- | | |
|----------------------------|--|
| 1. _____ nasolabial groove | A. corners of the mouth |
| 2. _____ philtrum | B. shallow V-shaped depression above the upper lip |
| 3. _____ labial commissure | C. reddish portion of the lips |
| 4. _____ vermillion zone | D. ala of the nose to the corners of the mouth |



Structures of the Oral Cavity—Maxillary View

1. The deepest point of the vestibule is called the _____.
 - A. labial frenum
 - B. alveolar mucosa
 - C. gingiva
 - D. vestibule fornix
2. Name, in order, the landmarks starting up from the maxillary central enamel surface.

3. Between which two teeth is the labial frenum located?

Label and color the following landmarks: alveolar mucosa, buccal frenum, buccal mucosa, gingiva, labial frenum, vestibule, and vestibule fornix.



Structures of the Oral Cavity—Mandibular View

Label and color the following landmarks: alveolar mucosa, gingiva, and labial mucosa.

1. The mucosa is the tissue that lines the inner surface of the _____ and it is named according to _____.
 - A. lips and cheeks—location
 - B. alveolar mucosa—location
 - C. gingiva—color
 - D. lips—color
2. The _____ is/are loosely attached and is/are highly vascular, giving this tissue a reddish color.
 - A. gingiva
 - B. labial mucosa
 - C. alveolar mucosa
 - D. commissures



Landmark on the Buccal Mucosa

Label and color the linea alba.

Label and draw in “Fordyce’s spots.”

1. Describe linea alba and where it is found.

2. What are Fordyce’s spots and what color are they?



Landmarks of the Oral Pharynx Area

Label and color the following landmarks: anterior tonsillar pillar, fauces, palatine tonsils, posterior tonsillar pillar.

Mix and match:

- | | |
|---------------------------|--|
| 1. _____ fauces | A. projection extending from the back of the soft palate |
| 2. _____ palatine tonsils | B. space in the back of the oral cavity |
| 3. _____ uvula | C. located between two set of pillars |

Another name for the posterior tonsillar pillars is _____.



Landmarks of the Palate

1. The line that extends down the middle of the hard palate is the _____.
2. The raised area just behind the maxillary central incisors is the _____.
3. The raised horizontal lines found on the palate are the _____.

Draw a red line to locate the palatine raphe.

Draw yellow lines to locate the palatine rugae.

Draw a blue circle around the incisive papilla.



Landmarks on the Dorsal Surface of the Tongue

Label and color the following papillae: circumvallate, filiform, foliate, and fungiform.

The tongue is divided in half by the _____.

Label, draw, and color a line from the tip of the tongue to the base of the tongue.

Match the papilla to the description.

- | | |
|--------------------------------|--|
| 1. _____ filiform papilla | A. largest papilla and mushroom shaped |
| 2. _____ fungiform papilla | B. hairlike papilla covering the dorsal side of the tongue |
| 3. _____ foliate papilla | C. located on the lateral border of the tongue |
| 4. _____ circumvallate papilla | D. give the tongue the “strawberry effect” |



Landmarks on the Ventral Surface of the Tongue

Label the lingual frenum and color it red.

Label the lingual vein and color it blue.

Label and color the sublingual caruncles and color them green.

Label the fimbriated folds on both sides of the ventral side of the tongue and shade them yellow.

Label the sublingual folds on both sides of the floor of the mouth and shade them pink.

Describe mandibular tori: _____

- A. glands on the floor of the mouth
- B. glands on the ventral sides of the tongue
- C. excess bone formations on the lingual side of the alveolar bone
- D. excess mucosal tissue formations on the lingual side of the alveolar bone



Basic Taste Buds of the Tongue

Label the “sour” taste buds and color them yellow.

Label the “sweet” taste buds and color them pink.

Label the “bitter” taste buds and color them brown.

Label the “salty” taste buds and color them green.

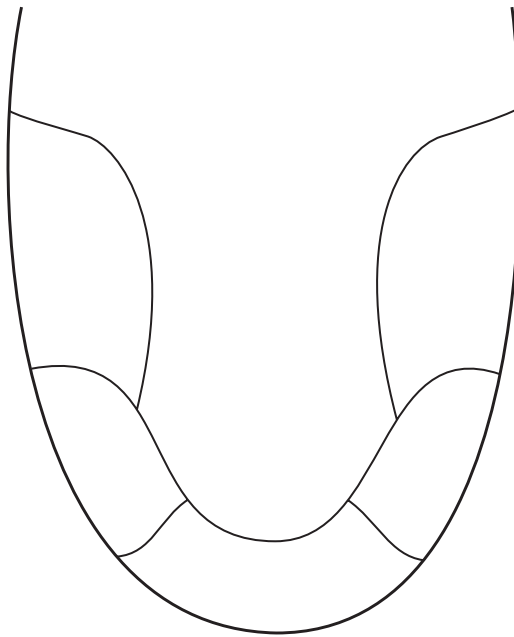
1. What stimulates the taste impulses?

2. Where are the taste buds located?

A. dorsal surface of the tongue

B. ventral surface of the tongue

3. Where do these receptors carry the taste impulses to?



Salivary Glands and Ducts

1. Which gland empties directly into the mouth?

2. Which of the glands is the largest?

3. Which duct ends in the sublingual caruncles?

Label and color the parotid gland and the Stensen's duct.

Label and draw an arrow to the buccinator muscle and the masseter muscle.

Label and color the submandibular gland and the Wharton's duct.

Label and color the sublingual gland.



Lateral Aspect of the Cranium and Face

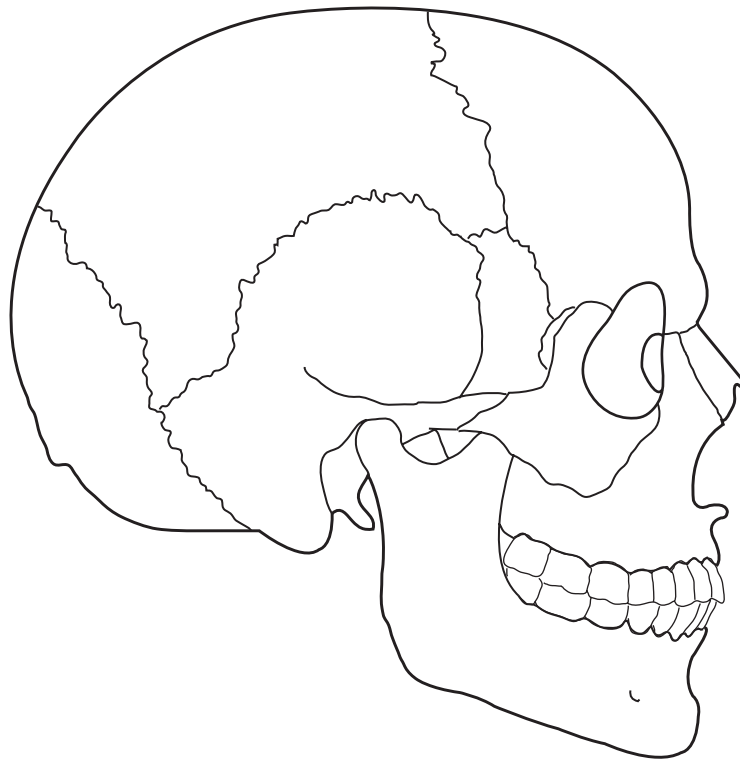
List, label, and then outline the bones of the cranium.

List, label, and color the bones of the face that can be seen.

Identify and label the following landmarks of the cranium and the face: mental foramen, styloid process, external auditory meatus, and the mastoid process.

Label and highlight the glenoid fossa.

1. The glenoid fossa is found on which of the following bones?
 - A. lacrimal bone
 - B. temporal bone
 - C. parietal bone
 - D. occipital bone
2. Which bone forms the posterior and bottom of the nasal septum?
 - A. vomer
 - B. ethmoid
 - C. inferior nasal conchae
 - D. zygomatic



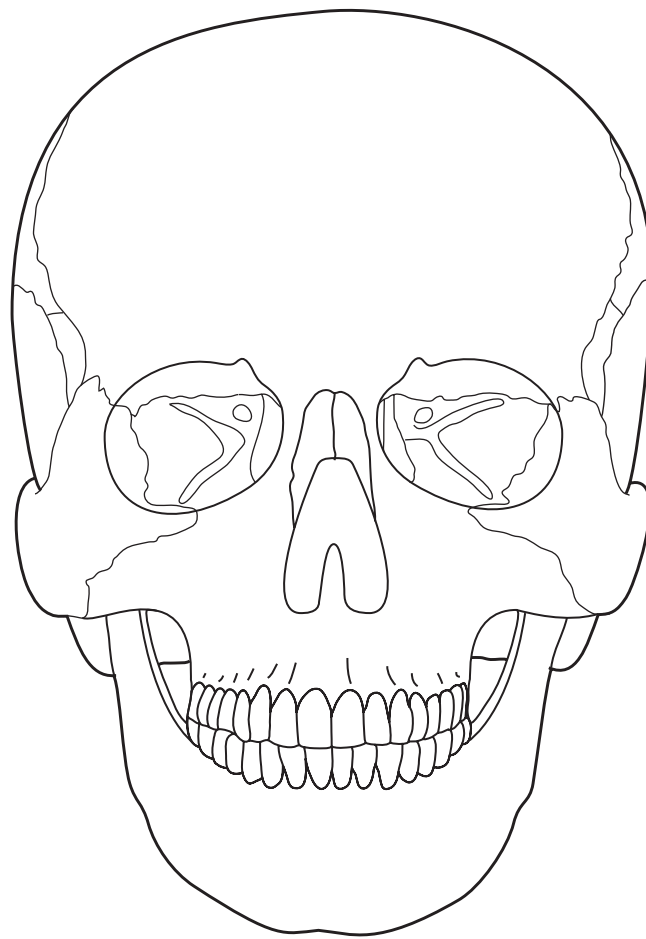
Frontal View of the Bones of the Cranium and Face

Using the same colors used in the figure on page 67, color in the bones of the face.

Label and color the inferior nasal conchae and the vomer.

Mark the alveolar process on the maxillary and mandibular.

1. Where is the symphysis found?
 - A. on the maxilla near the alveolar process
 - B. on the zygomatic bone
 - C. in the center, near the border of the mandible
 - D. on the nasal bone



Landmarks of the Palate

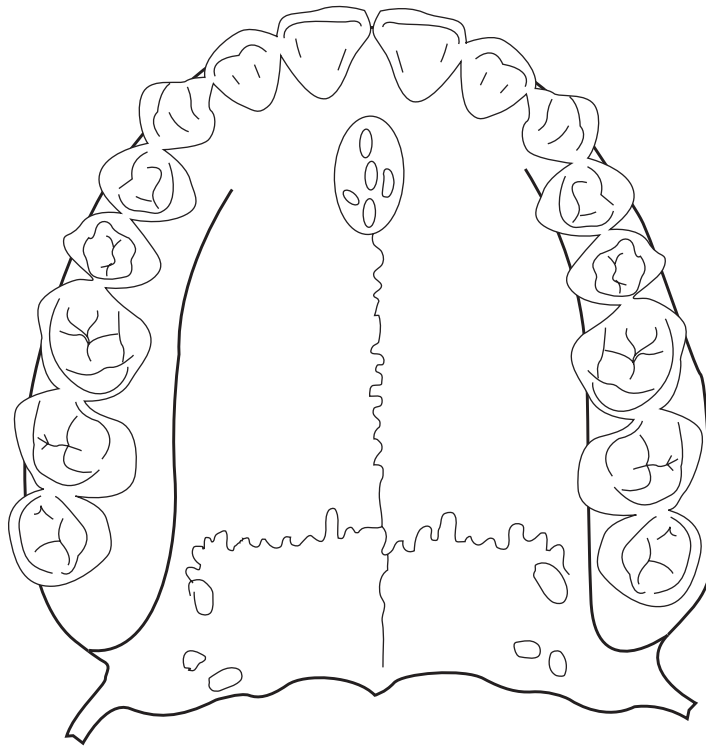
How many foramina are there in total on the palate?

Outline and label the foramina found on the palate.

Label and color the palatine process of the maxilla.

Draw arrows to show the median palatine suture and the transverse palatine suture.

Draw a red "X" where the maxillary tuberosity is located.



Lateral View of the External Surface of the Mandible

Mix and match:

- | | |
|---------------------------------|---|
| 1. _____ ramus | A. anterior portion of the ramus |
| 2. _____ coronoid process | B. extends from the mental foramen, passes the last tooth, and curves up on the ramus |
| 3. _____ condyle | C. the vertical portion of the mandible |
| 4. _____ external oblique ridge | D. the part of the mandible that articulates with the glenoid fossa |

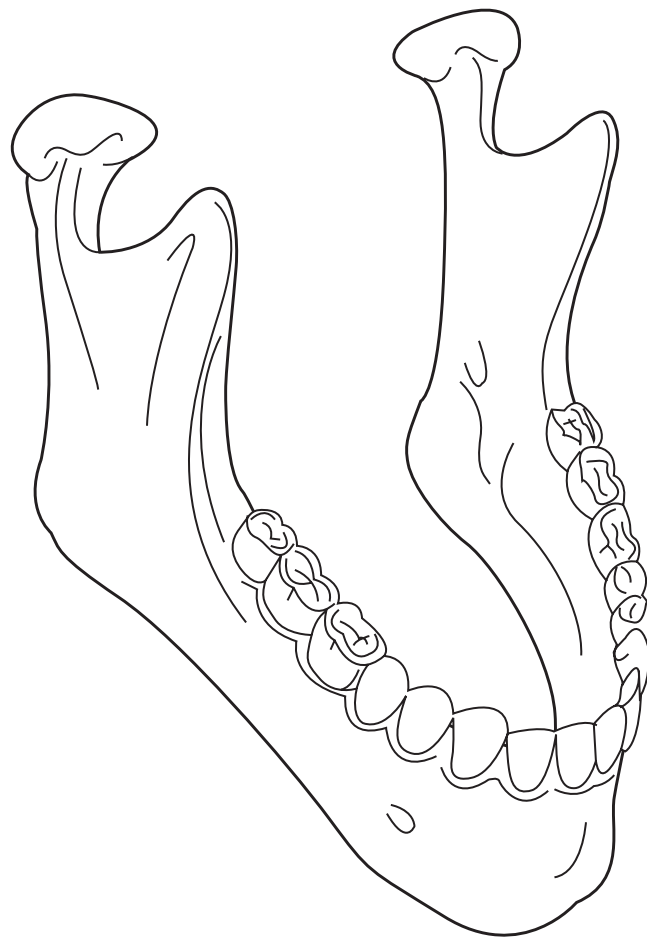
Label and color the following parts of the mandible: body of the mandible, ramus, condyle, and coronoid.

Label and then draw a line showing the internal and external oblique ridges.

Outline the border of the mandible.

Label and put a red "X" locating the angle of the mandible, the retromolar area, and the mental protuberance.

How many foramina are found on the mandible? _____



Internal Lingual View of the Mandible

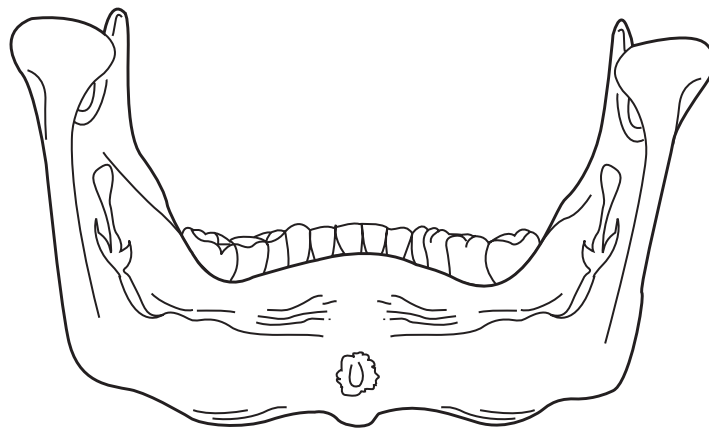
List the foramina seen on the lingual side of the mandible.

Name the bony raised area that surrounds the lingual foramen.

Label and color the coronoid process and the condyle process on the mandible.

What is another name for the mylohyoid groove?

Label and color the foramen, the genial tubercles, and the mylohyoid groove.



View from lingual

Temporomandibular Joint (TMJ)

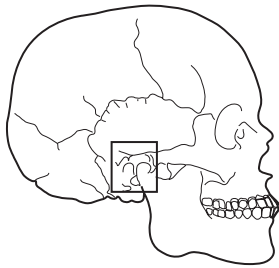
What part of the mandible is part of the temporomandibular joint? Label and color.

- A. coronoid
- B. condyle

Label and color the glenoid fossa.

Label and color the upper and lower joint cavities.

The _____ lies between the condyle and the glenoid fossa. Label and color.



Movement of the Temporomandibular Joint (TMJ)–Hinge Joint

Label and color the articular disc.

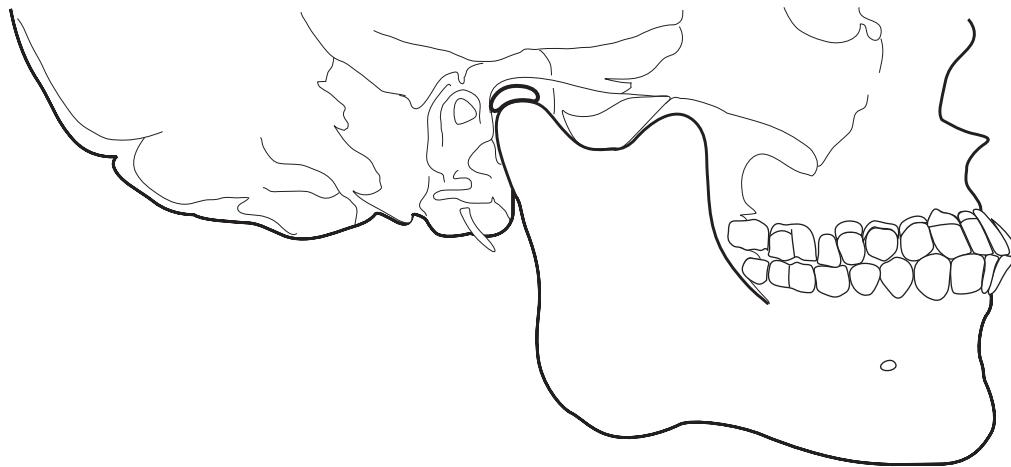
Label and color the condyle of the mandible.

Label and color the glenoid fossa.

Another name for articular disc is the _____.

Draw a line pointing to the articular eminence.

Describe the hinge motion of the TMJ.



Movement of the Temporalmandibular Joint (TMJ)– Gliding Joint

Label and color the articular disc using the same color as in figure on page 79.

Label and color the condyle of the mandible using the same color as in figure on page 79.

Label and color the glenoid fossa using the same color as in figure on page 79.

Describe the gliding movement of the TMJ.



Muscles of Mastication–Lateral View

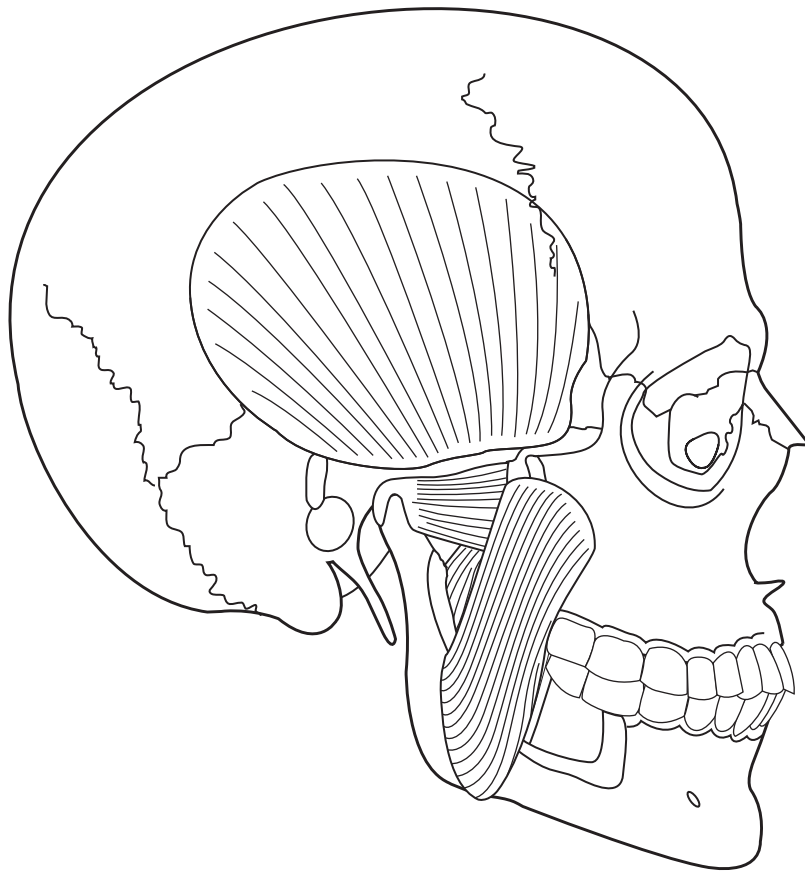
List the muscles of mastication.

Label and color the following landmarks: neck of the condyle, zygomatic bone, and the angle of the mandible.

Label and color the muscles of mastication.

Mix and match:

- | | |
|------------------------------------|---|
| 1. _____ external pterygoid muscle | A. this is the most powerful muscle and can be seen when the teeth are clenched |
| 2. _____ internal pterygoid muscle | B. this is the only muscle that opens the jaw |
| 3. _____ masseter muscle | C. inserts into the coronoid process of the mandible |
| 4. _____ temporal muscle | D. this muscle is on the lingual side of the mandible and runs vertically |



Muscles of Facial Expression

List the four main facial muscles of expression.

Name the muscle that surrounds the mouth: _____

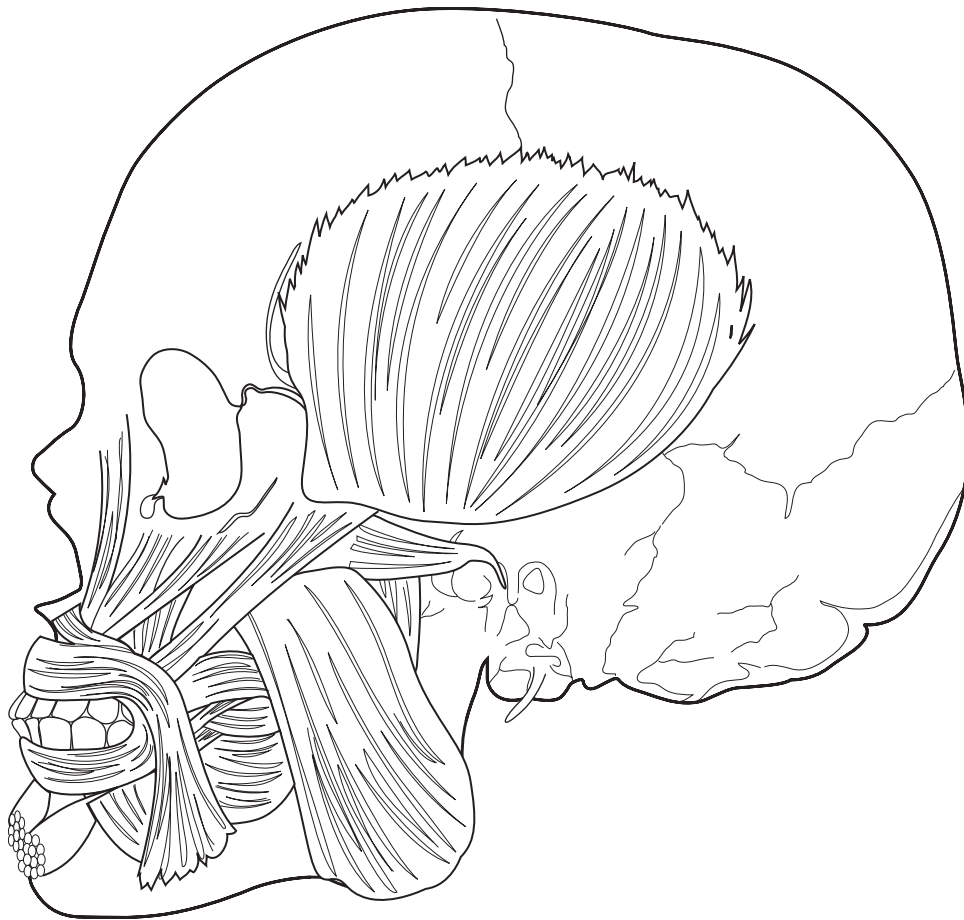
Which muscle of expression lifts the corners of the mouth upward and backward, the “smiling muscle”?

- A. buccinator
- B. mentalis
- C. orbicularis oris
- D. zygomatic major

Which muscle of expression wrinkles the skin of the chin and protrudes the lower lip?

- A. buccinator
- B. mentalis
- C. orbicularis oris
- D. zygomatic major

Label and color the muscles of facial expression.



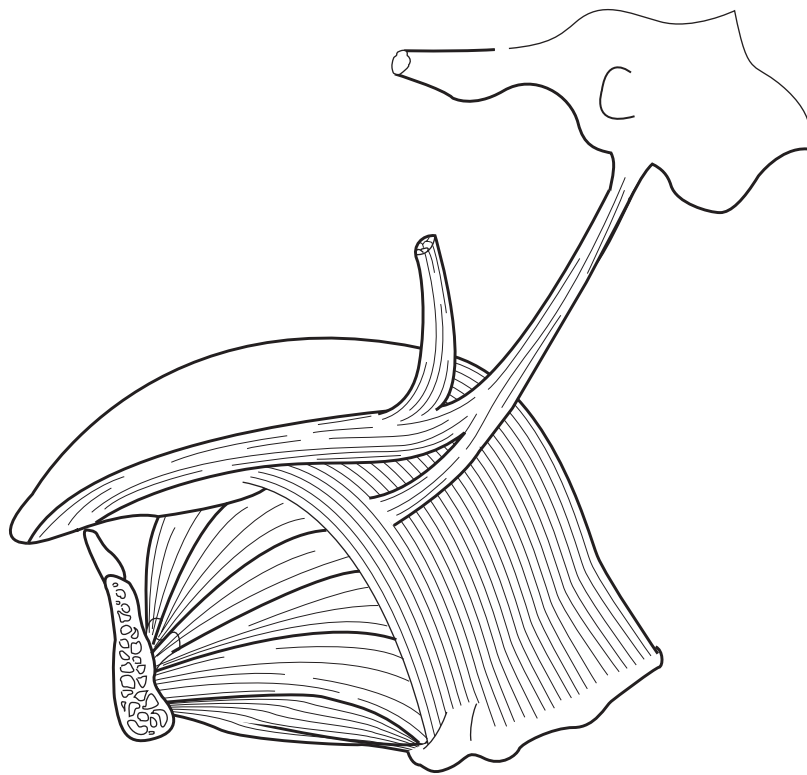
Extrinsic Muscles of the Tongue

Label and color the following landmarks: hyoid bone, styloid process, and the dorsum of the tongue.

List the extrinsic muscles of the tongue.

Label and color the extrinsic muscles of the tongue.

Which of the extrinsic muscles of the tongue lie across the floor of the mouth?



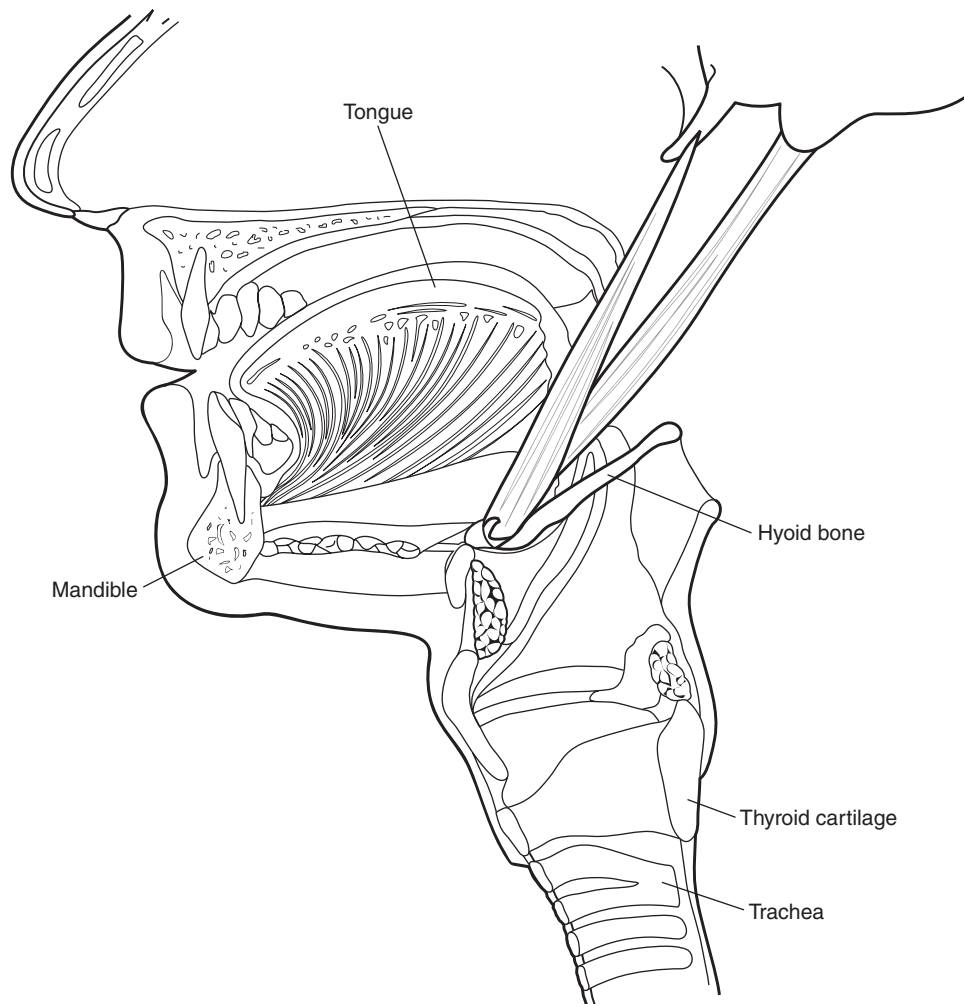
Muscles of the Floor of the Mouth

List, label, and color the muscles of the floor of the mouth.

All of these muscles attach to the _____.

Mix and match:

- | | |
|---------------------|--|
| 1. _____ digastric | A. origin is the styloid process of the temporal bone |
| 2. _____ mylohyoid | B. genial tubercles are the origin of the muscle |
| 3. _____ stylohyoid | C. this muscle is divided into two portions called "bellies" |
| 4. _____ geniohyoid | D. fan-shaped muscle that elevates the tongue |



The Hyoid Bone

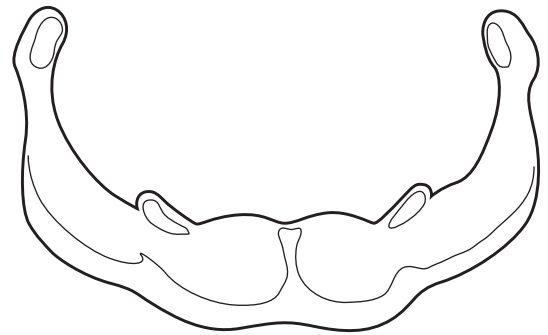
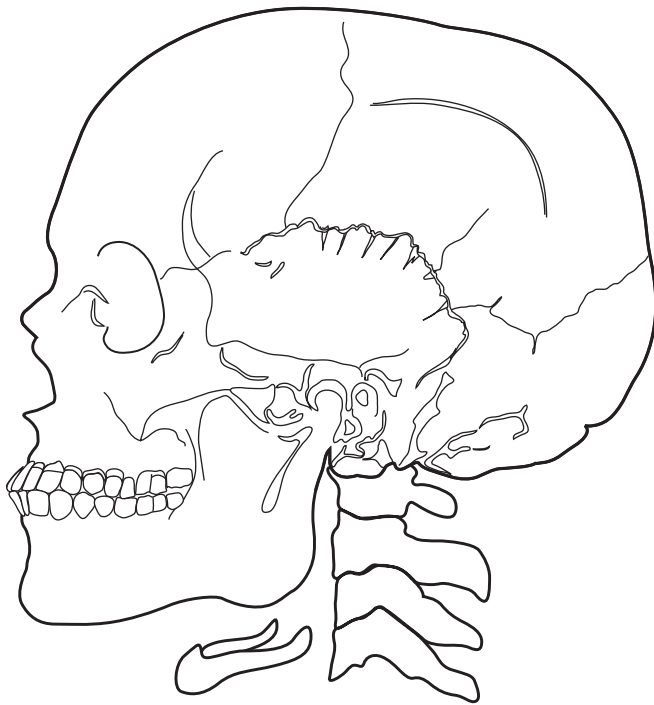
The hyoid bone is located below the posterior of the _____ at the base of the tongue and in front of the _____. It is a free-floating bone for _____ to attach.

Label and color the hyoid bone on both pictures.

List and label the parts of the hyoid bone:

Which of the following groups of muscles are all attached to the hyoid bone for support?

- A. muscles of the tongue
- B. muscles of mastication
- C. muscles on the floor of the mouth
- D. A and B
- E. A and C



Muscles of the Soft Palate

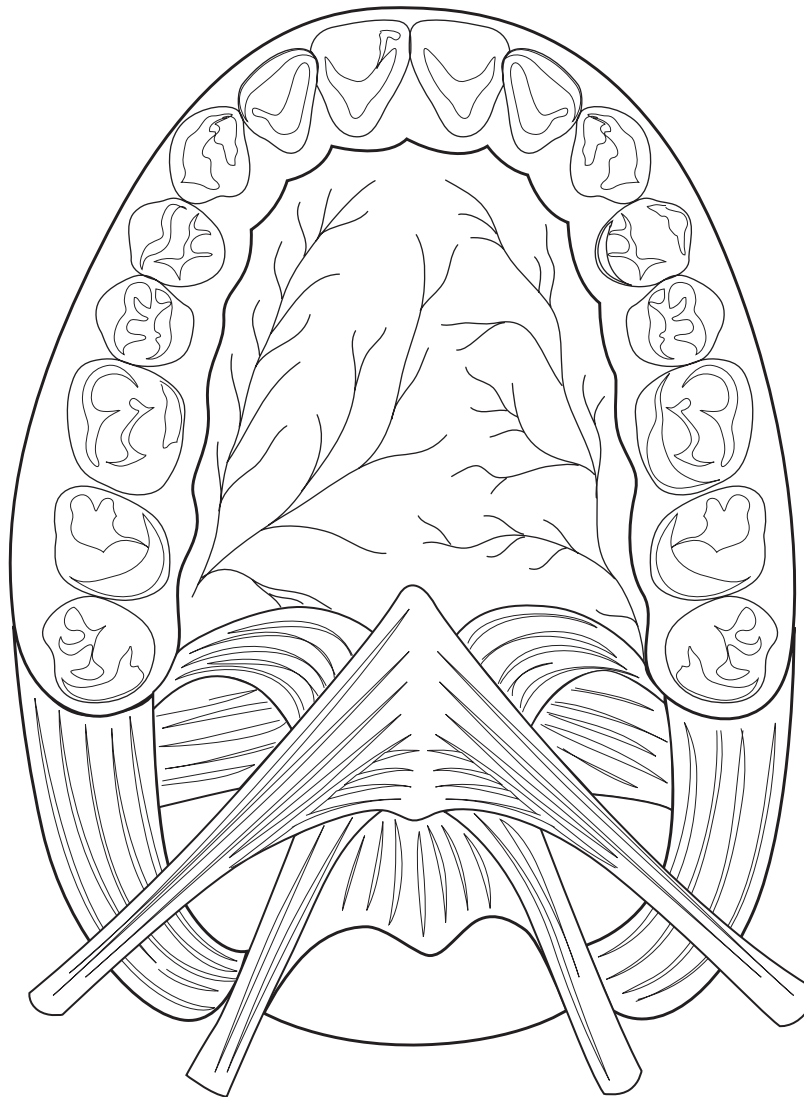
Label and color the two muscles of the soft palate.

Draw a line to the uvula and the nasopharynx area.

What is the function of these two muscles of the soft palate?

The palatoglossus muscles are also a part of the which of the following groups of muscles?

- A. muscles of mastication
- B. muscles of the facial expression
- C. muscles of the tongue
- D. muscles on the floor of the mouth



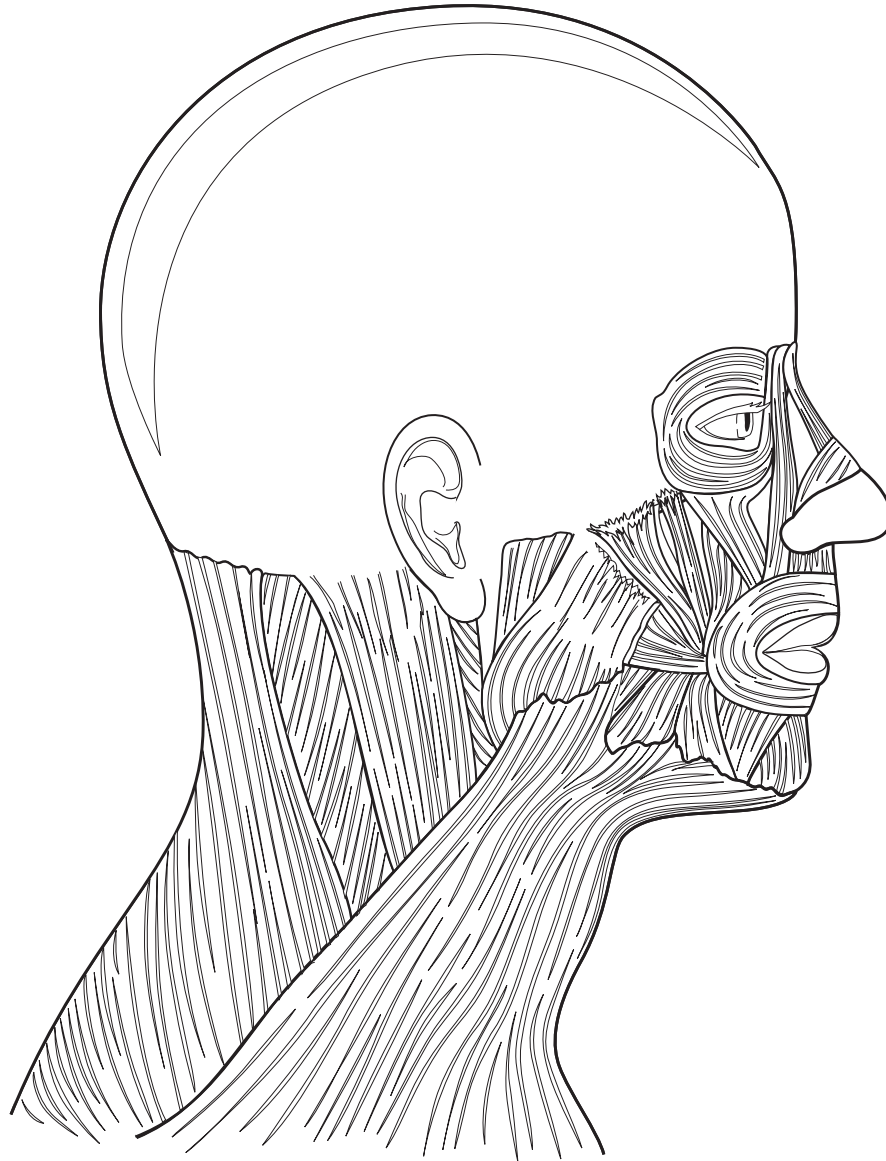
Muscles of the Neck

List, label, and color the muscles of the neck:

Mix and match:

- | | |
|-------------------------------------|---|
| 1. _____ platysma muscle | A. this muscle assists in elevating the chin |
| 2. _____ sternocleidomastoid muscle | B. draws down the mandible, corners of the mouth, and the lip |
| 3. _____ trapezius muscle | C. moves the head backward and laterally |

List and label the *insertion point* of each of the muscles of the neck:



Nerves of the Maxillary Arch

Label and color the trigeminal ganglion and the pterygopalatine ganglion.

Label and color the maxillary branch.

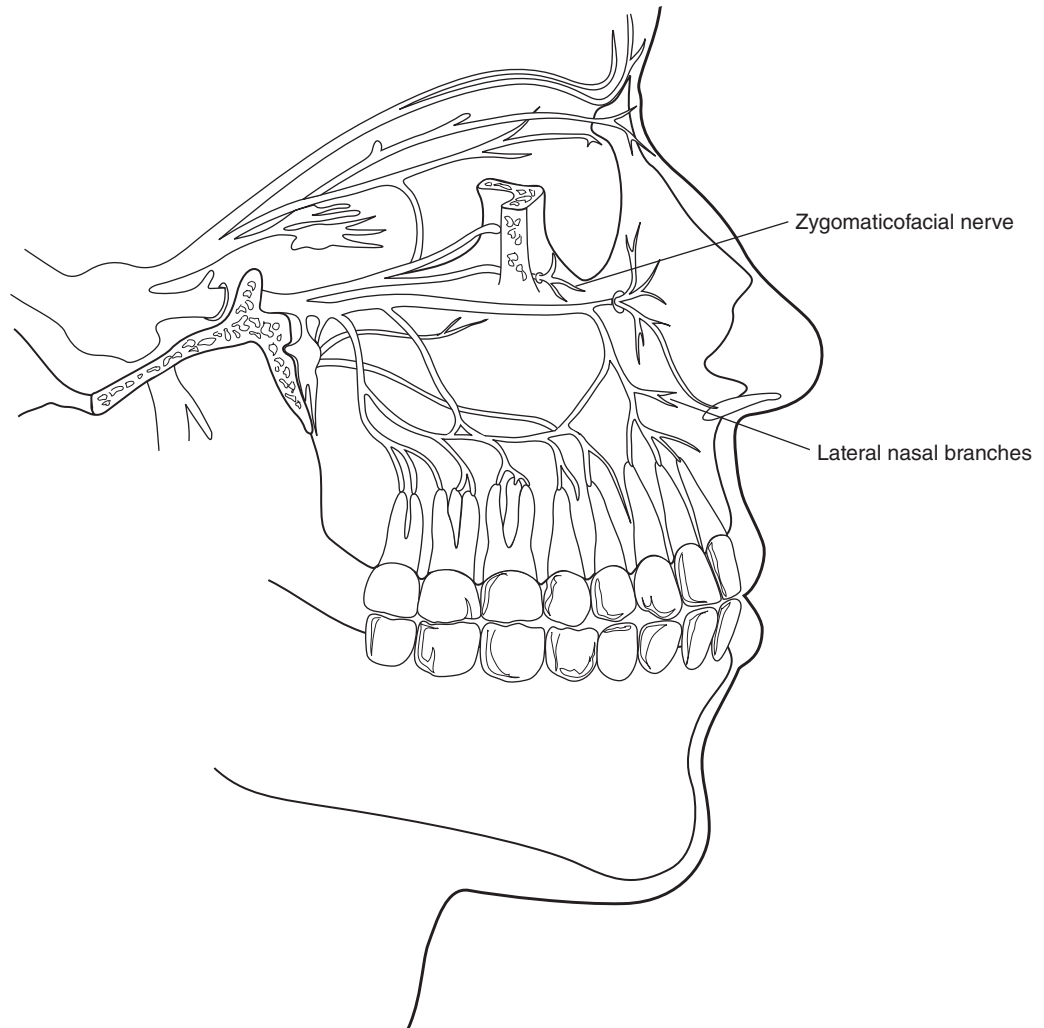
1. Name the nerve that innervates the maxillary sinus, cheeks, and maxillary molars except the mesial buccal root of the first molar. _____
2. Name the nerve that innervates the mesial buccal root of the first molar and the roots of the maxillary bicuspid. _____
3. Name the nerve that innervates the maxillary cuspids, laterals, and central incisors. _____

Label and color the three branches of the maxillary branch of the trigeminal nerve that are describe above.

Mix and match:

- | | |
|--------------------------------|---|
| 1. _____ infraorbital nerve | A. branch of maxillary nerve that exits through the infraorbital foramen and has two branches |
| 2. _____ nasopalatine branch | B. innervates the area around the eyes and behind the zygomatic arch |
| 3. _____ pterygopalatine nerve | C. this nerve exits through the incisive foramen |
| 4. _____ zygomatic nerve | D. part of the nerve branches into the greater and lesser palatine nerves and innervates the hard and soft palate |

Label and color the four nerves listed in the mix and match.

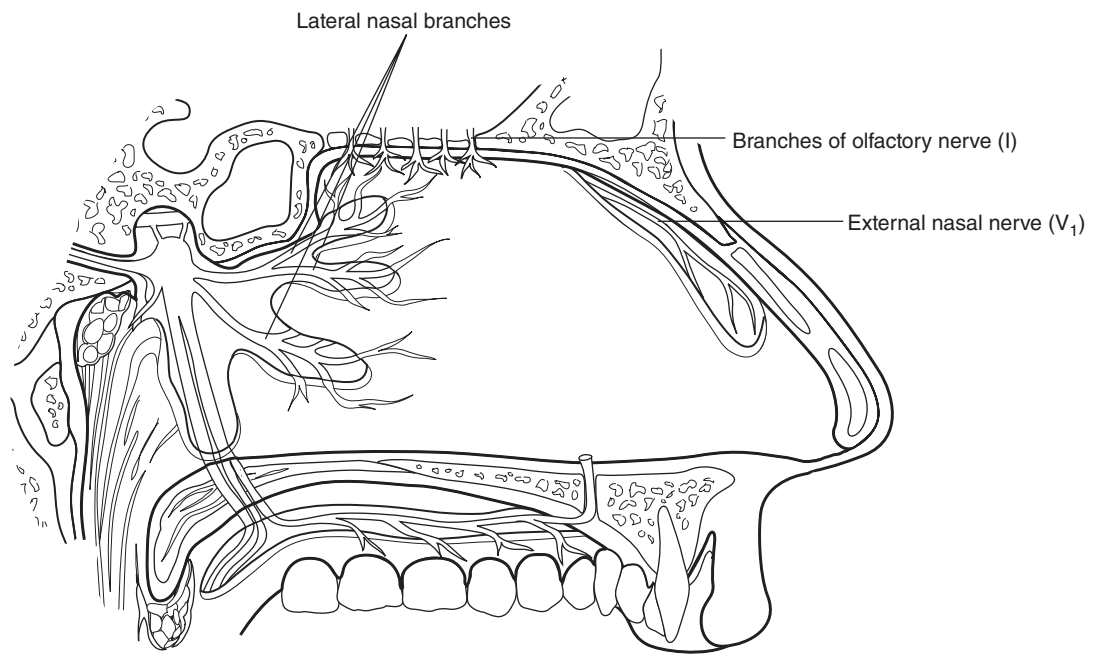


Medial View of the Branches of the Pterygopalatine Nerve

List the three branches of the pterygopalatine nerve:

Label and color these branches.

Label and color the following: maxillary nerve, pterygopalatine ganglion, pterygopalatine canal, and the sphenoid sinus.



Mandibular Nerves

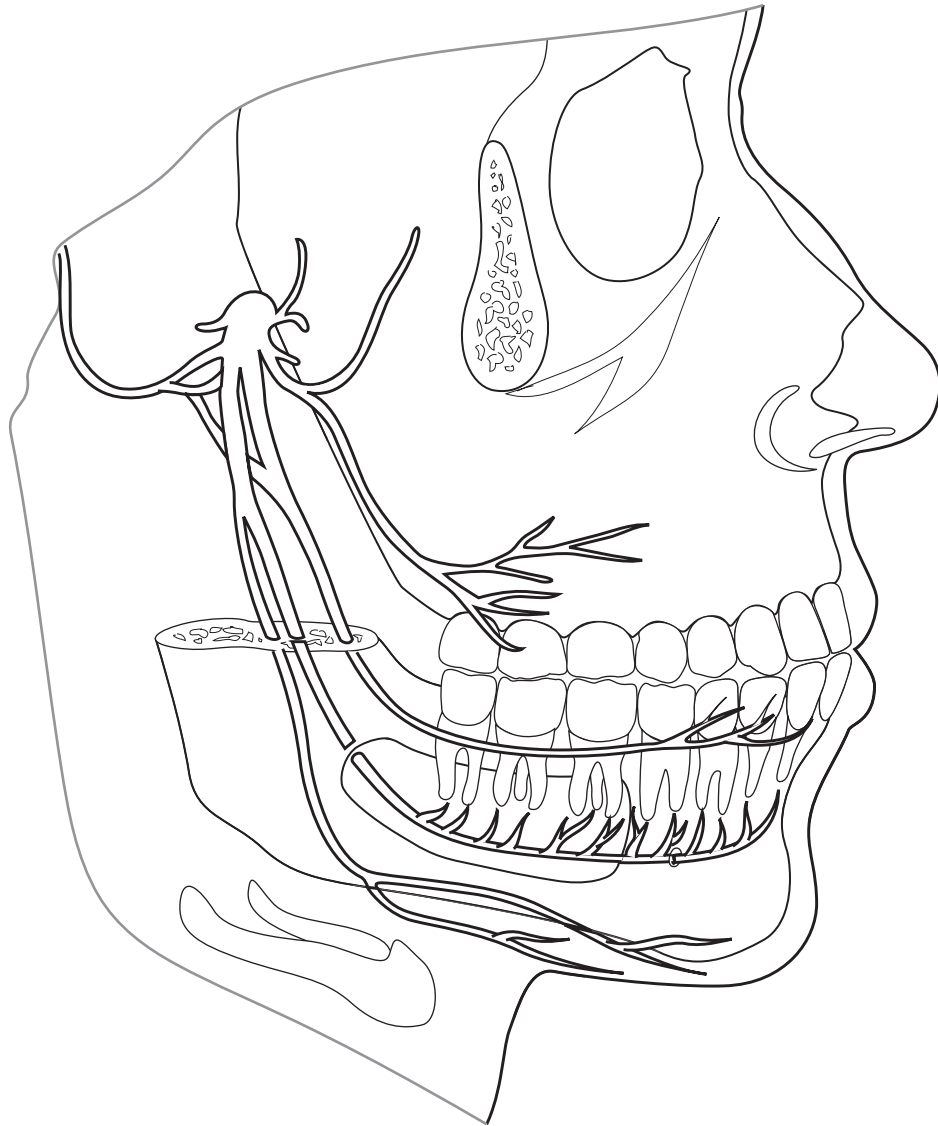
List the three branches of the mandibular nerve:

Label and color these three branches.

List the three branches of the inferior alveolar nerve:

Label and color these three branches.

1. Which of the following nerves innervates the floor of the mouth and the ventral side of the tongue?
 - A. lingual nerve
 - B. buccal nerve
 - C. mental nerve branch
 - D. none of the above
2. This nerve innervates the premolars and molars and the gingiva:
 - A. buccal branch
 - B. lingual branch
 - C. inferior alveolar nerve branch
3. The incisive nerve branch innervates the anterior teeth and the labial gingiva:
 - A. This is a true statement.
 - B. This is a false statement.



Arteries of the Face and Oral Cavity

Label the common carotid artery.

1. This artery supplies blood to the face and the oral cavity:
 - A. internal carotid artery
 - B. external carotid artery
2. Branches are named according to:
 - A. the alphabet
 - B. the areas they supply
 - C. the nerves they are located near
 - D. none of the above

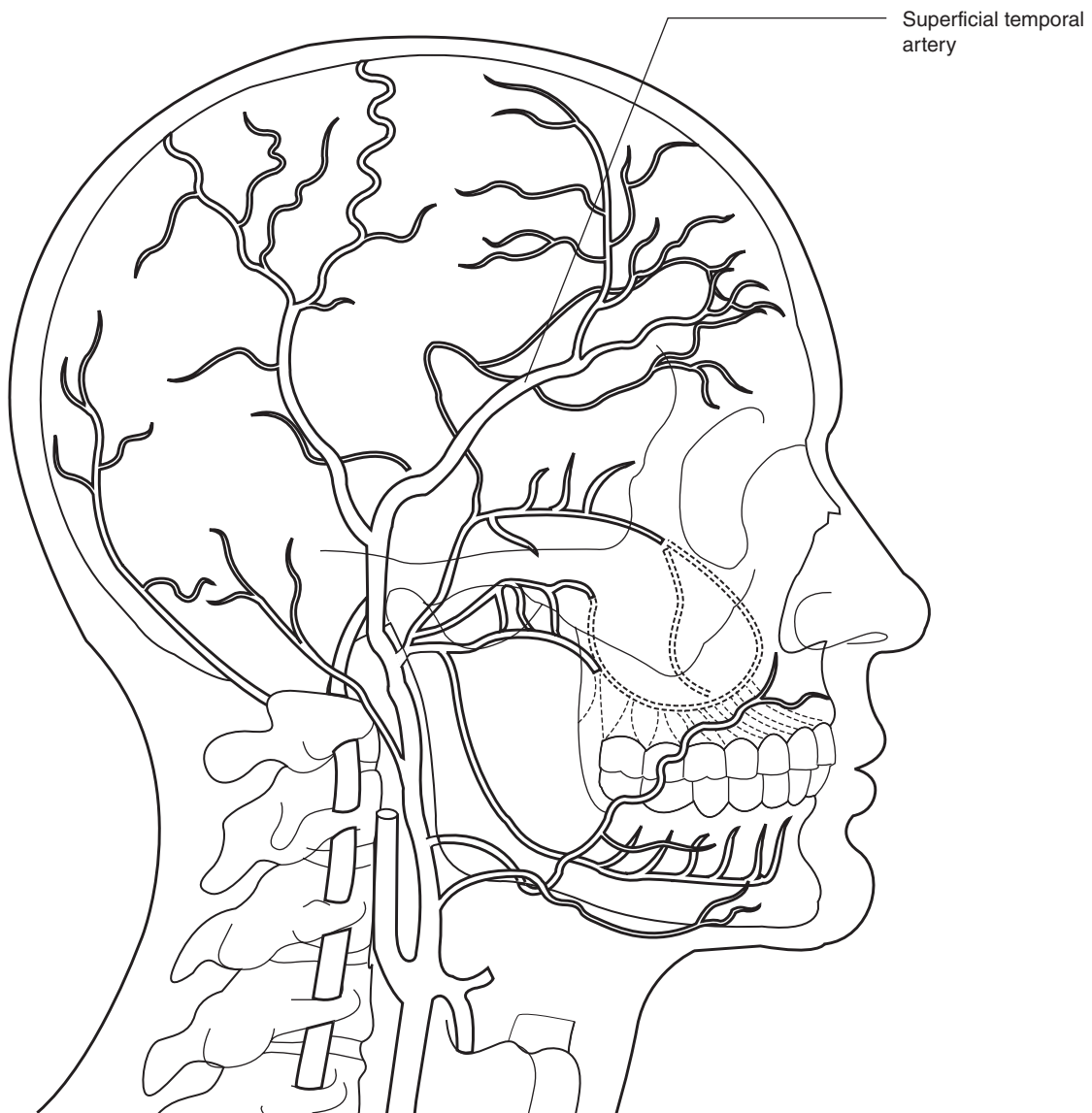
List the branches of the external carotid artery:

Label and color these branches.

List, label, and color the branches of the mandibular artery:

Mix and match:

- | | |
|--|--|
| 1. _____ facial artery | A. this is the largest branch of the external carotid artery and supplies the facial structures |
| 2. _____ lingual artery | B. supplies the entire tongue, floor of the mouth, lingual gingiva, and portion of soft palate and tonsils |
| 3. _____ middle superior alveolar artery | C. this artery has six branches and branches across the mandible to the corners of the mouth, then upward toward the eye |
| 4. _____ incisive artery | D. supplies the maxillary premolars |
| 5. _____ maxillary artery | E. supplies the mandibular anterior teeth |

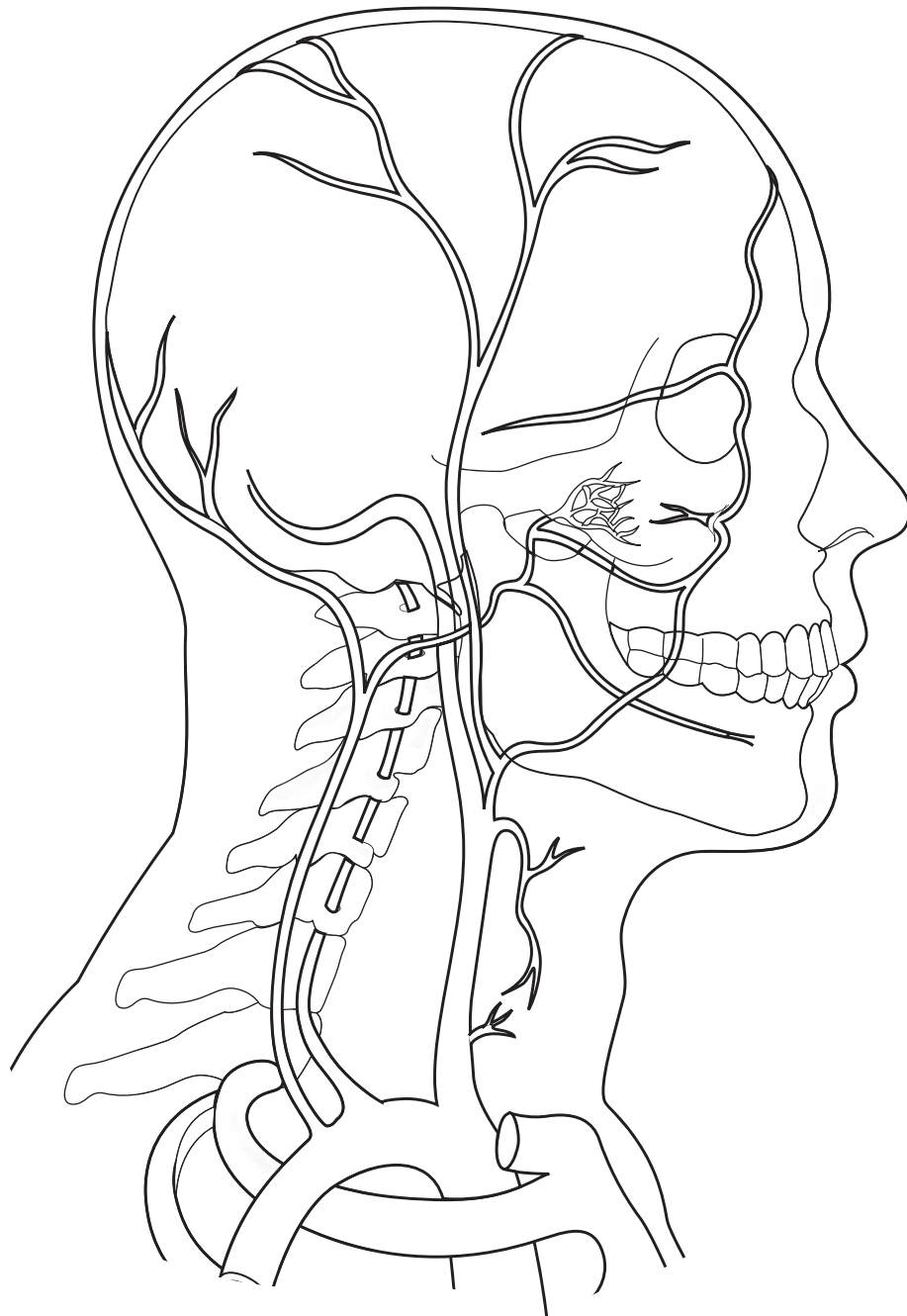


Veins of the Face and Oral Cavity

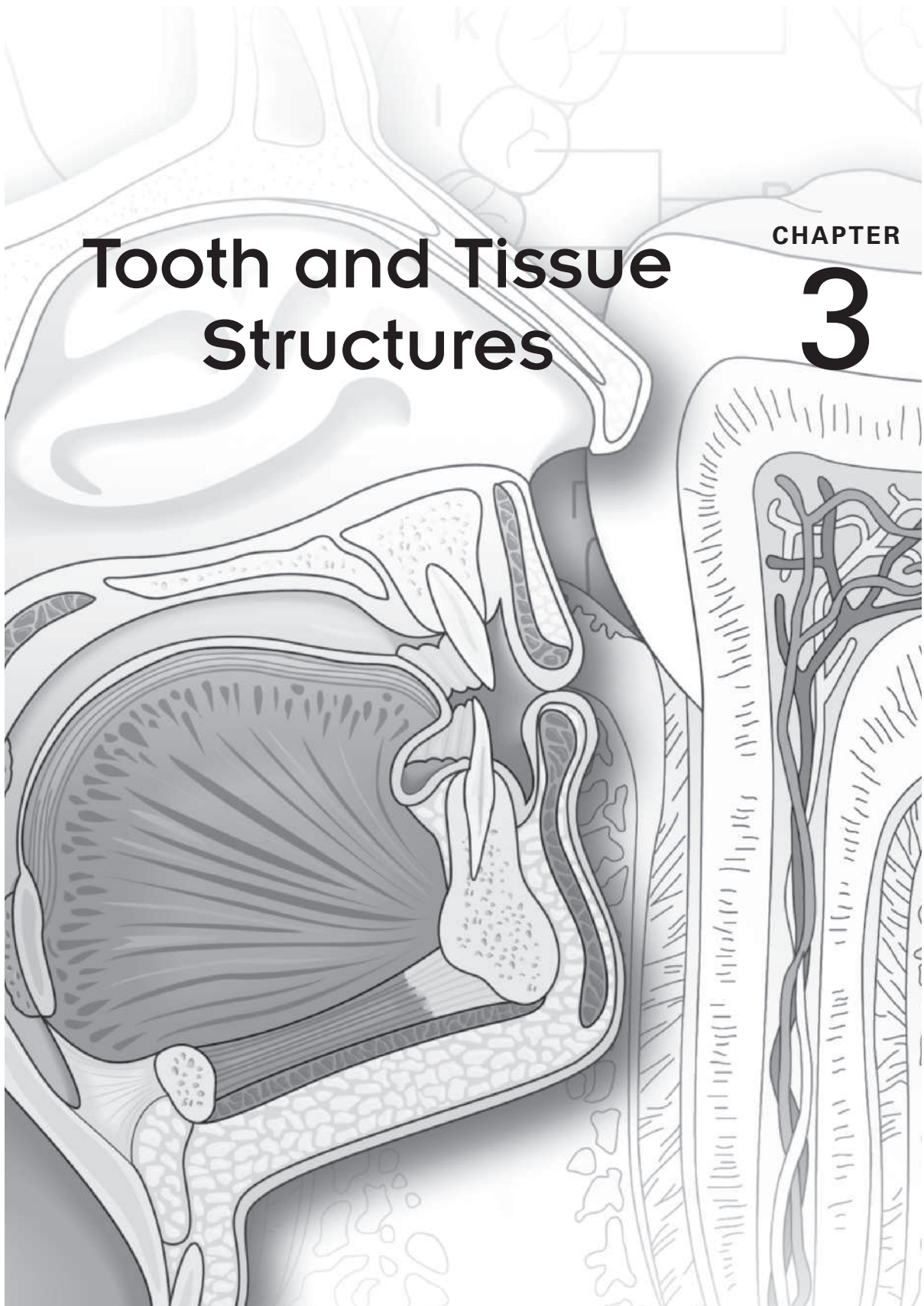
1. The _____ vein drains the blood from the cranium, face, and neck into the superior vena cava.
2. The veins are divided into the _____ veins and the _____ veins.

List, label, and color the superficial veins.

List, label, and color the deep veins.



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Tooth and Tissue Structures

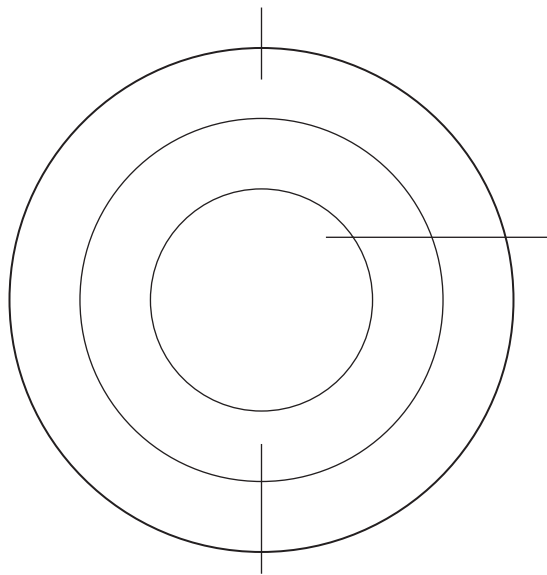
CHAPTER

3

The Three Primary Embryonic Layers

Match the structure to the definition. Label and color the structure on the illustration and write the names of at least four tissues in each colored area that are differentiated from this primary embryonic layer.

- | | |
|-------------------|-------------------------------|
| 1. _____ mesoderm | A. the outer embryonic layer |
| 2. _____ endoderm | B. the middle embryonic layer |
| 3. _____ ectoderm | C. the inner embryonic layer |



Embryology

1. The prenatal phase of the pregnancy where rapid cell division and differentiation occurs is _____.
2. In what time phase does this occur?

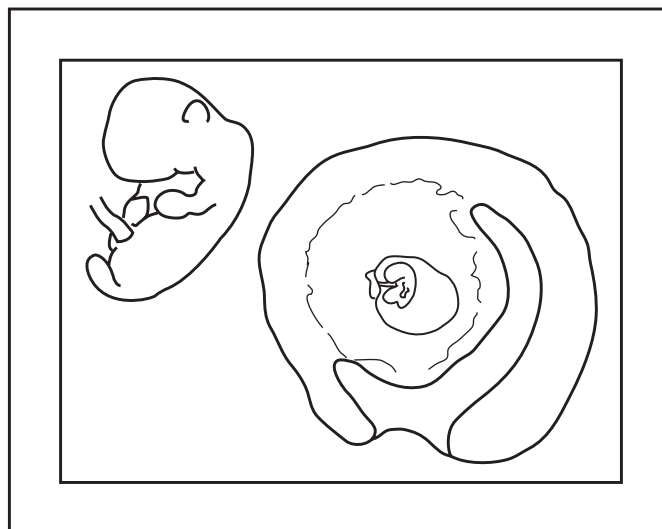
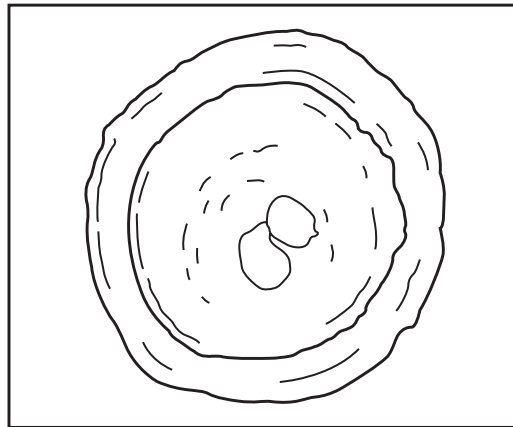
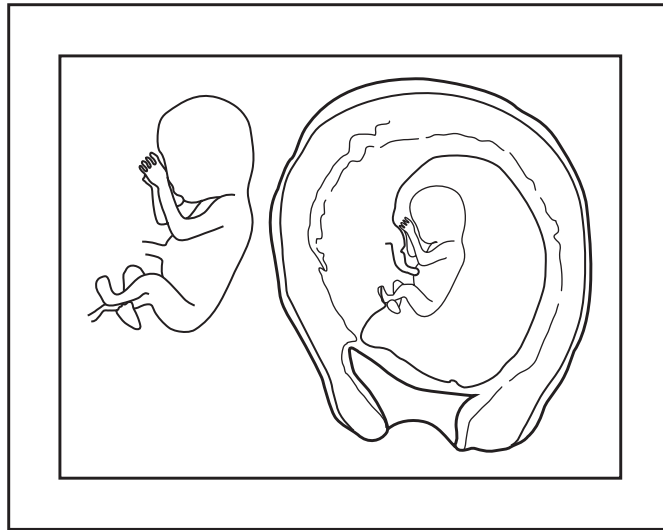
Color the box blue around the drawing above that indicates this phase.

3. The prenatal phase of the pregnancy where the primitive face develops is _____.
4. What time phase does this occur in?

Color the box red around the drawing above that indicates this phase.

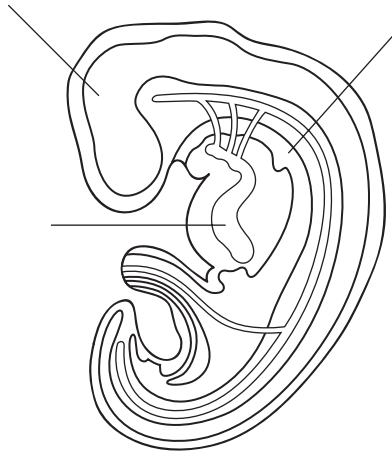
5. The prenatal phase of the pregnancy where the oral cavity and nasal cavity are separated is _____.
6. What time phase does this occur in?

Color the box green around the drawing above that indicates this phase.



Developing Embryo with Primary Layers Identified

1. Label and color the primary embryonic layer ectoderm. List structures you would find here.
2. Label and color the primary embryonic layer endoderm. List structures you would find here.
3. Label and color the primary embryonic layer mesoderm. List structures you would find here.



Facial Processes Shown on an Embryo (Child and Adult)

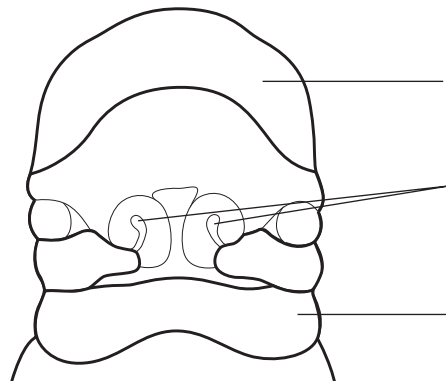
Identify and color the mandibular process red on the embryo, child, and adult line drawings.

Identify and color the philtrum blue on the adult and child line drawings.

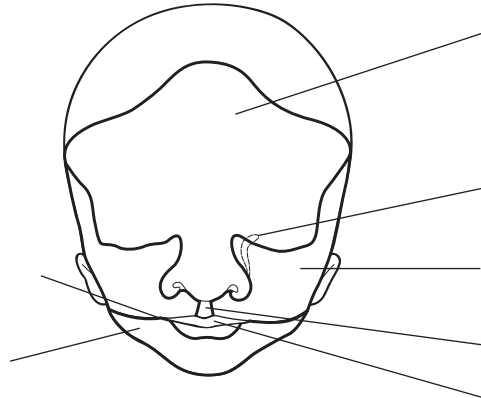
Identify and color the maxillary process green on the adult, child, and embryo line drawings.

Identify and color the frontal process yellow on the adult, child, and embryo line drawings.

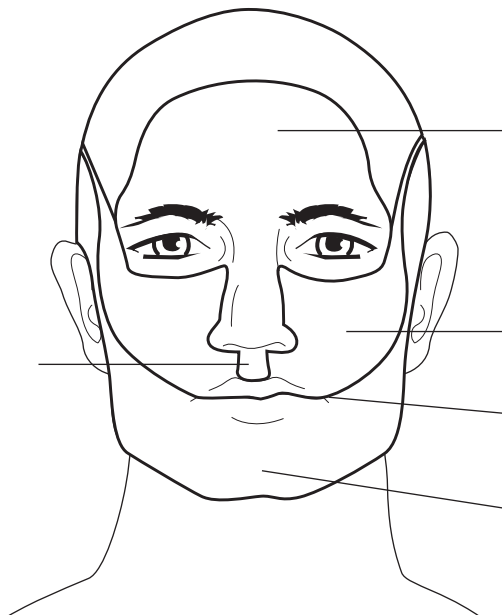
Identify and place a black star on the labial commissures on the adult and child line drawings.



Embryo



Child



Adult

Development of the Palate

Draw a black line to identify the median palatine suture and the incisive suture.

Identify and label the primary palate and color the teeth in this area red.

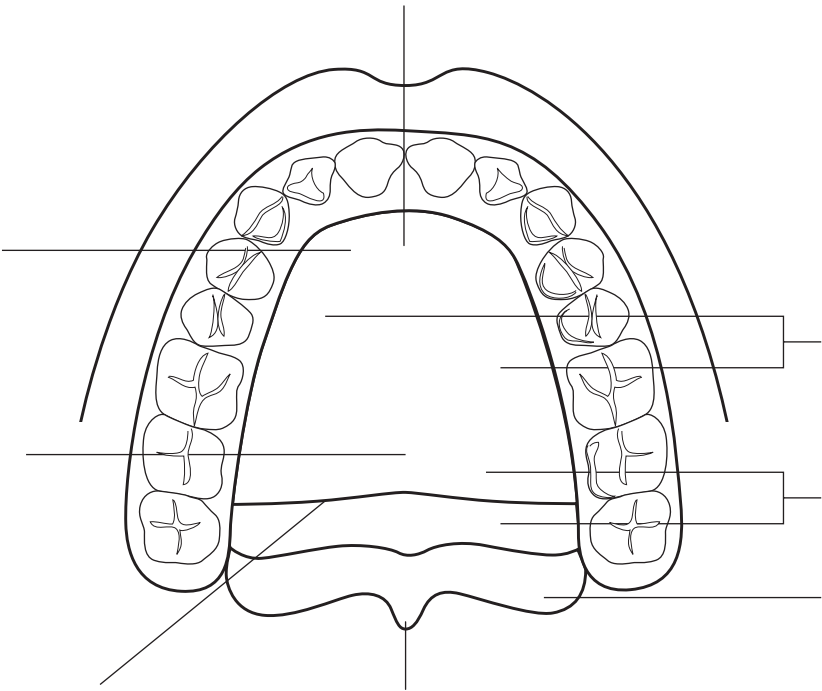
1. What purpose does the primary palate serve?

Identify and label the soft palate and color it yellow.

Identify and label the secondary palate and color the teeth in this area blue.

2. How many teeth are present in the secondary palate?

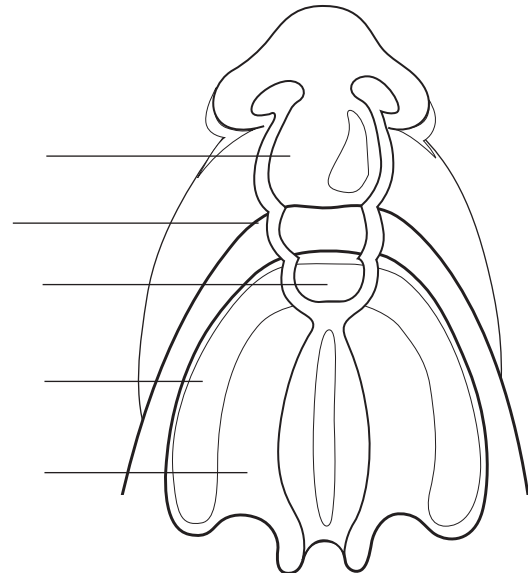
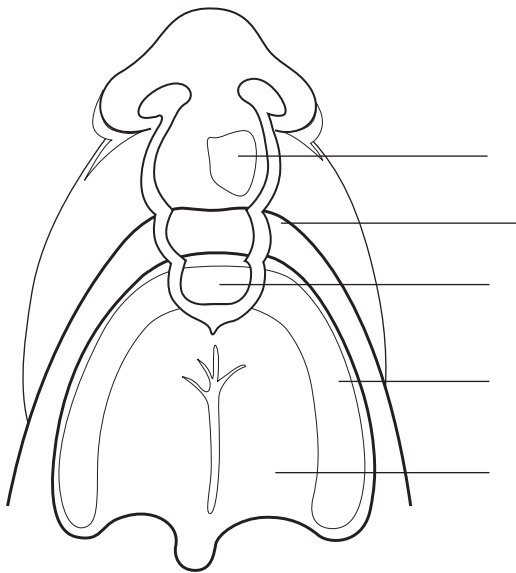
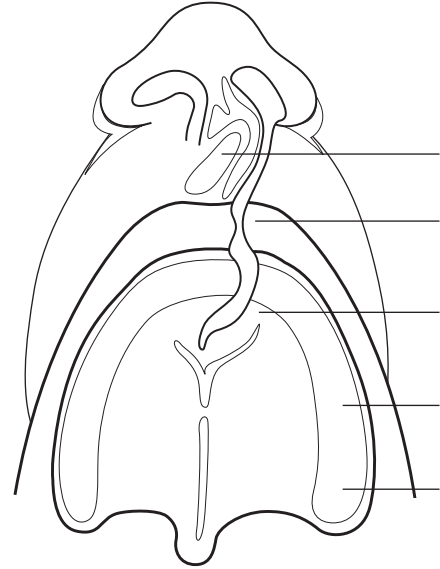
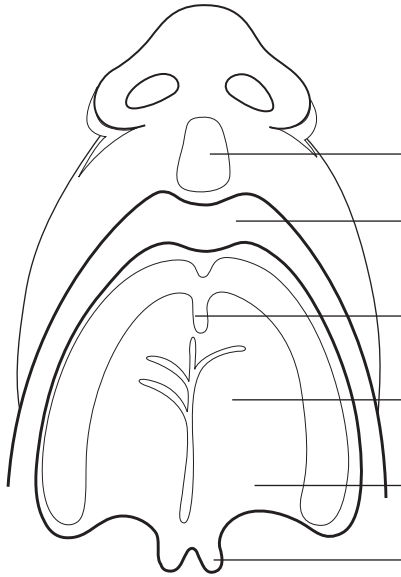
Identify and label the hard palate and color it green.



Bilateral Cleft of the Lip (Alveolar Process and Primary Palate)

Label and color the following: secondary palate, primary palate, philtrum, hard and soft palate, alveolar process, lip, uvula, incisive papillae.

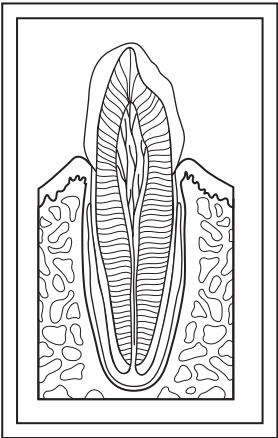
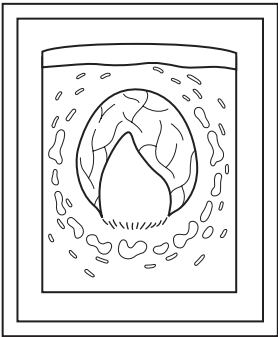
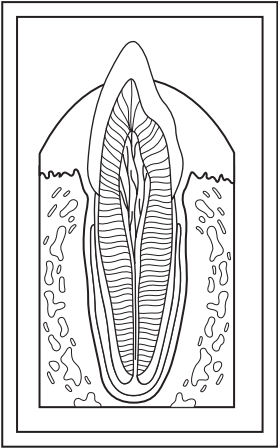
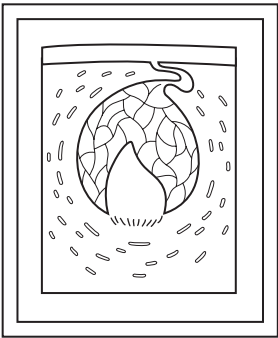
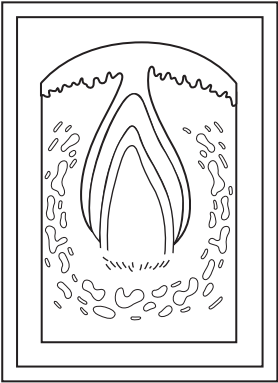
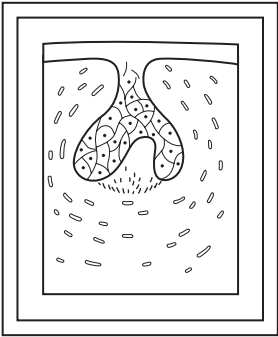
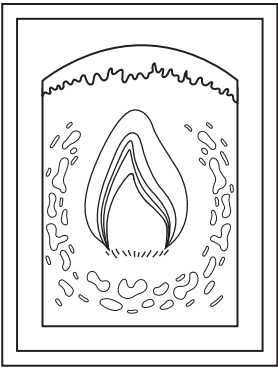
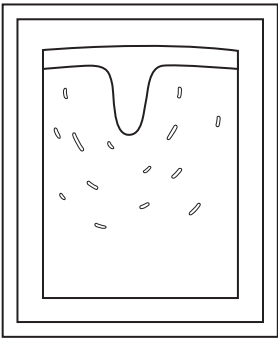
1. How many cleft lips occur in 1,000 live births? _____
2. Are cleft lips more common in boys or girls? _____
3. How many cleft palates occur? _____
4. Are cleft palates occurring alone more common in boys or girls? _____.



Life Cycle of the Tooth

Label and give the approximate prenatal time span for each drawing.

Using the colors of the rainbow (red, orange, yellow, green, blue, indigo, violet), beginning with red color the box around the image in order of the life cycle of the tooth. For the final wearing away of the tooth, color the box in black.



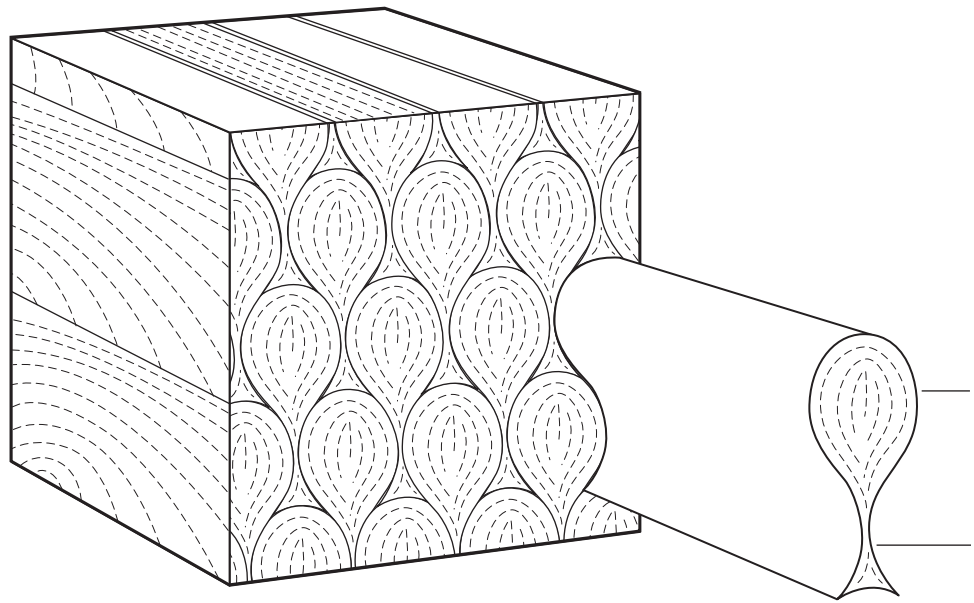
Enamel Rods

Label the heads of the enamel rods identified on the line art and color them red.

Label the tails of the enamel rods identified on the line art and color them blue.

Multiple choice:

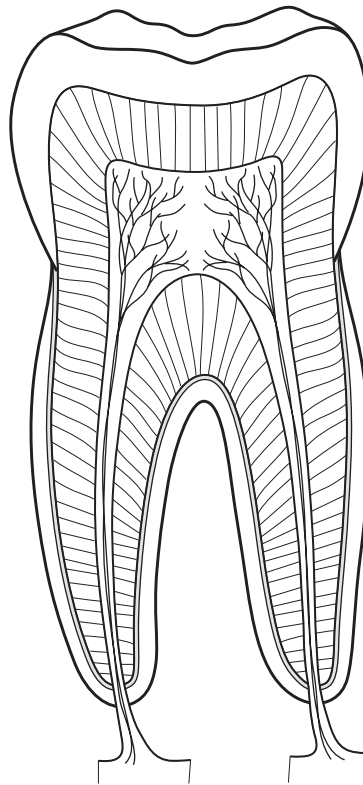
1. The _____ aid in the developing of enamel rods.
 - A. cementoblasts
 - B. odontoblasts
 - C. ameloblasts
 - D. pulpoblasts
2. The enamel rods not visible to the naked eye are _____ micrometers in diameter.
 - A. 6
 - B. 4
 - C. 10
 - D. 2



Tissues of the Tooth

Match, color, and label the following tissues of the tooth:

- | | |
|--------------------------|---|
| 1. _____ enamel (green) | A. the structure located around the root, it covers the dentin on the root portion of the tooth |
| 2. _____ dentin (yellow) | B. the hardest living tissue in the body |
| 3. _____ pulp (red) | C. makes up the bulk of the tooth |
| 4. _____ cementum (blue) | D. made from nerves and blood vessels |

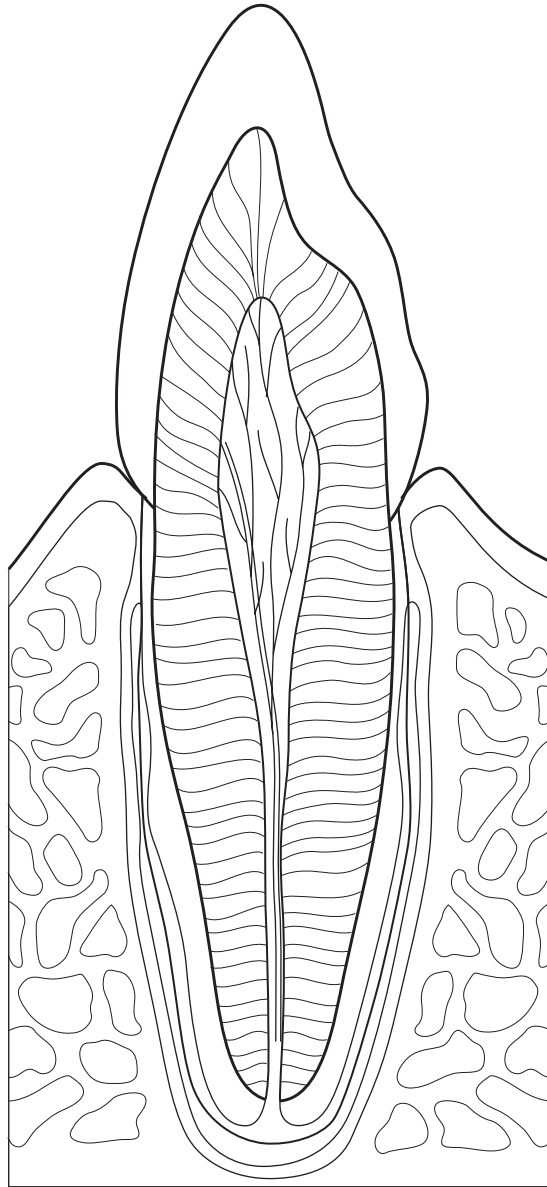


Enamel

Locate and color the enamel on the line art.

Mix and match:

- | | |
|-----------------------------------|---|
| 1. _____ lines of Retzius | A. accentuated incremental lines that indicate the trauma of birth |
| 2. _____ interprismatic substance | B. slight ridges on the cervical third of certain teeth that extend mesiodistally |
| 3. _____ neonatal line | C. the substance surrounding the inner portion of the rod core of each enamel rod |
| 4. _____ imbrication lines | D. appear as incremental lines or bands around the layers, much like the growth rings on a tree |

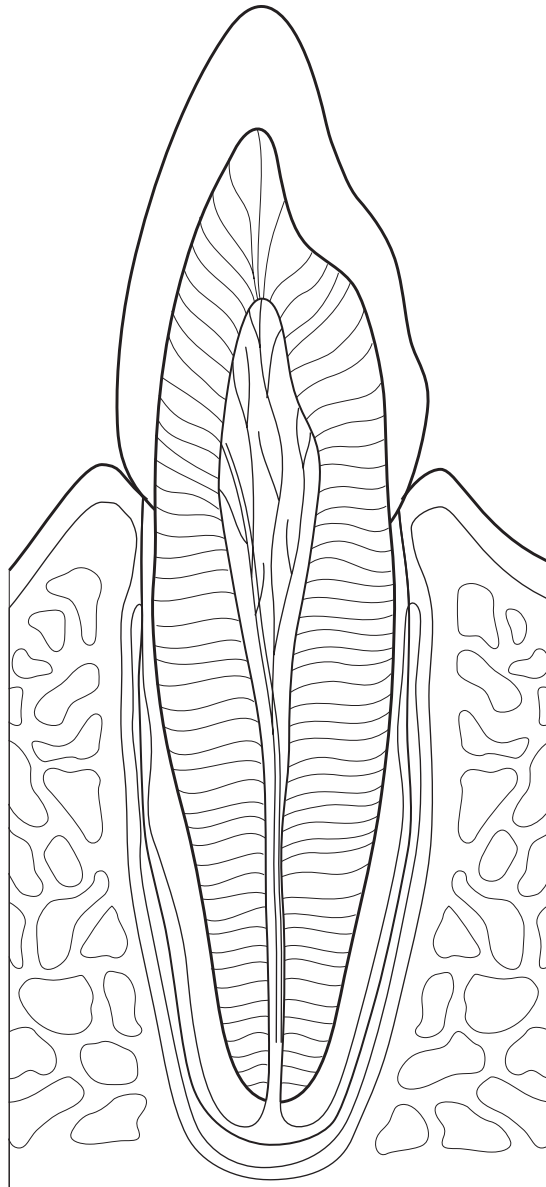


Dentin

Locate and color the dentin on the line art.

Mix and match:

- | | |
|---|--|
| 1. _____ imbrication lines of Von Ebner | A. forming the bulk of the tooth |
| 2. _____ contour lines of Owen | B. stained growth rings or incremental lines in dentin |
| 3. _____ primary dentin | C. found between the tubules of the dentin |
| 4. _____ intertubular dentin | D. lines in the dentin that demonstrate a disturbance in the body metabolism |

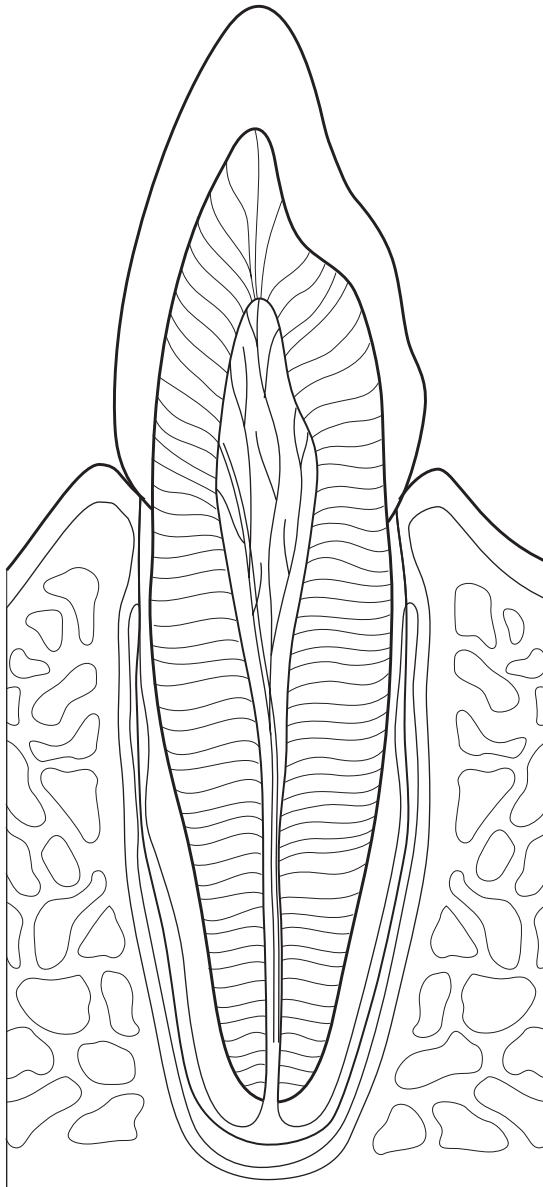


Pulp

Locate and color the pulp on the line art.

Label the pulp horns, pulp chamber and pulp canals.

1. A condition where the pulp is damaged due to an injury and tissue becomes inflamed is _____.
2. Cells from which connective tissue evolve are _____.
3. The substance between the cells in the pulp chamber are called _____.

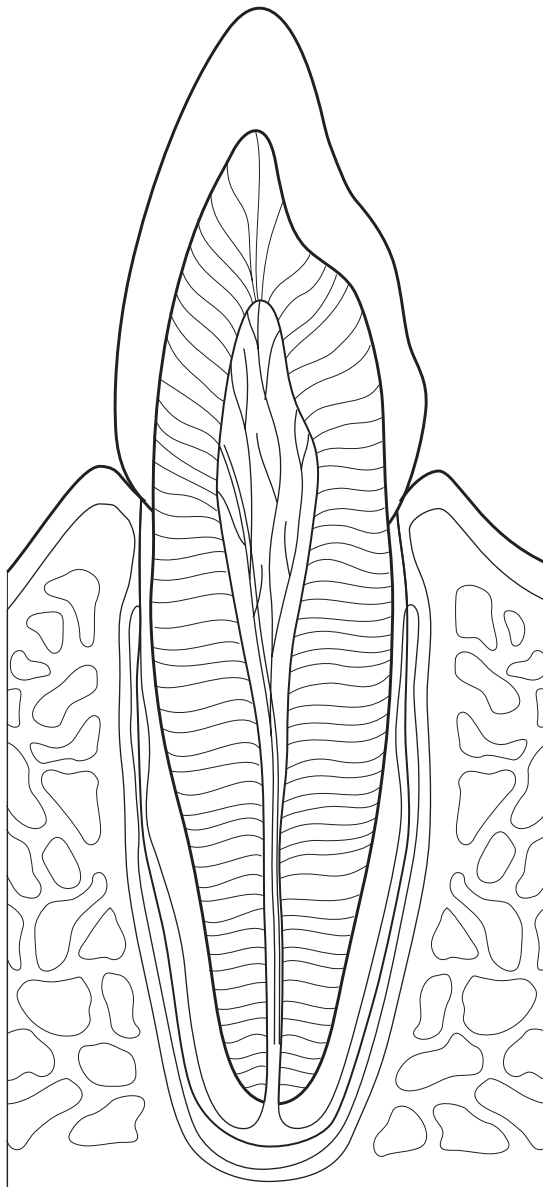


Cementum

Locate and color the cementum on the line art.

True or false:

1. _____ the cementum continues to develop throughout life.
2. _____ the cementum is darker than enamel.
3. _____ the cementum is lighter than dentin.
4. _____ the Sharpey's fibers act as anchors between the alveolar bone and the dentin.
5. _____ the cementum is softer than dentin.



Tooth and Surrounding Tissues

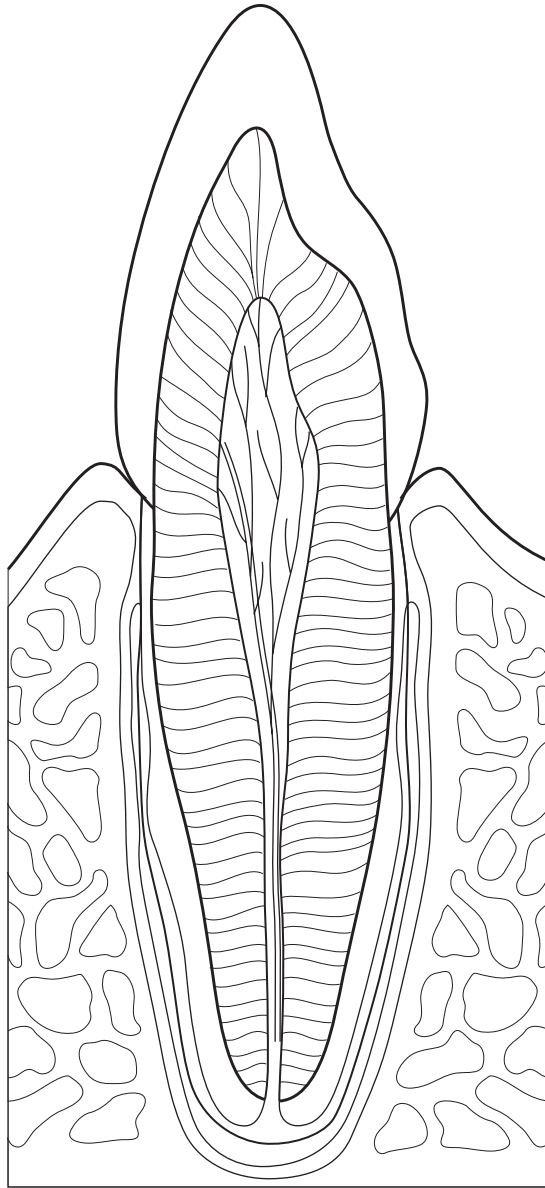
Label and color the pulp, cementum, lamina dura, gingival tissue, alveolar process, dentin, and enamel.

Draw an arrow to and label the dentinoenamel junction (DEJ).

Draw an arrow to and label the cementoenamel junction (CEJ).

Draw an arrow to and label the apex of the tooth.

1. Describe what tooth structure pulp stones are made from and discuss where they are located and how common they are.
-



Sharpey's Fibers and Cementum

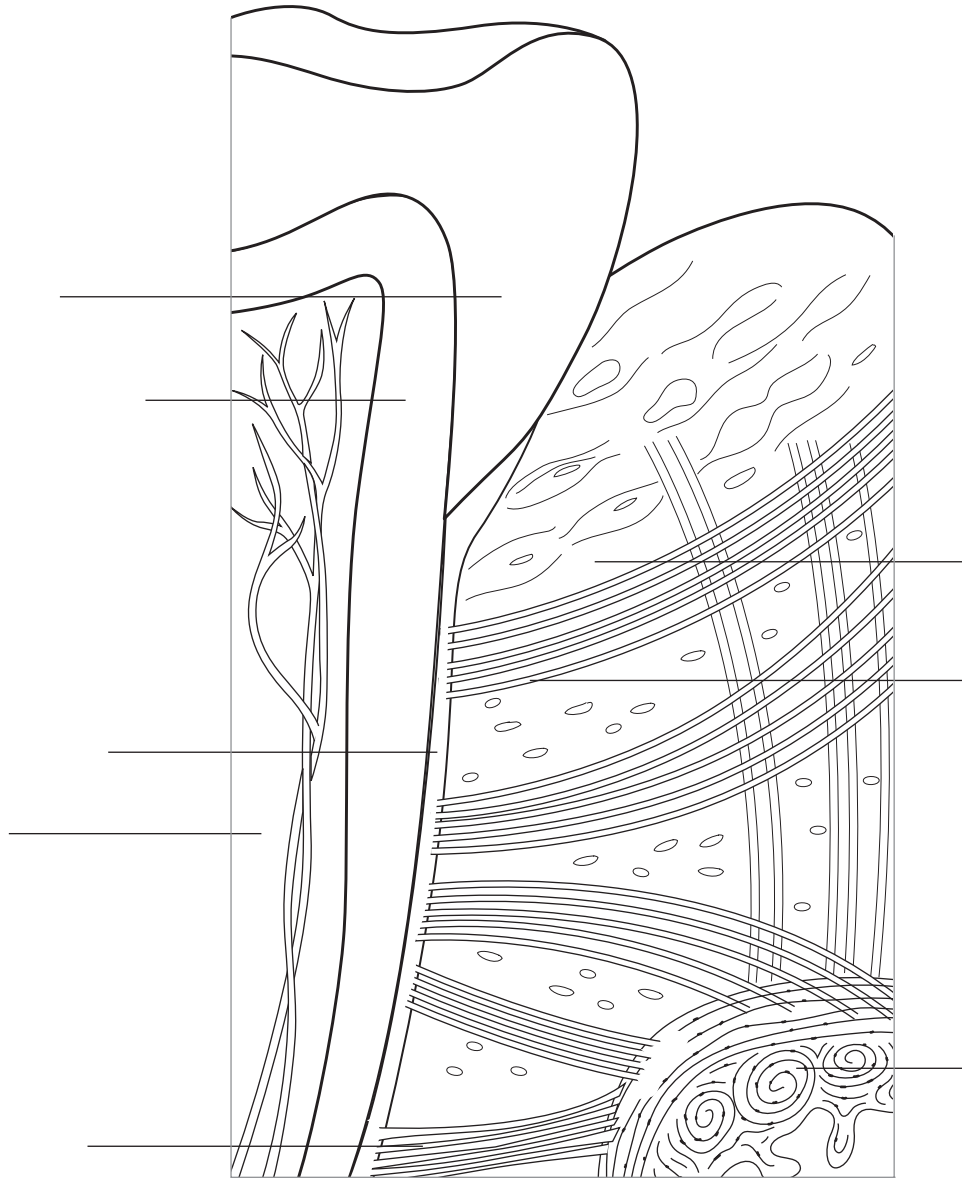
Label and color the enamel, dentin, cementum, pulp, periodontal ligaments, lamina propria gingival fiber groups, and alveolar crest of the alveolar bone proper.

Draw arrows and label the cementsenamel junction, dentinocementum junction, epithelial attachment, and Sharpey's Fibers.

1. Describe how the tooth is secured to the bone.

2. Another name for the lamina propria is

.

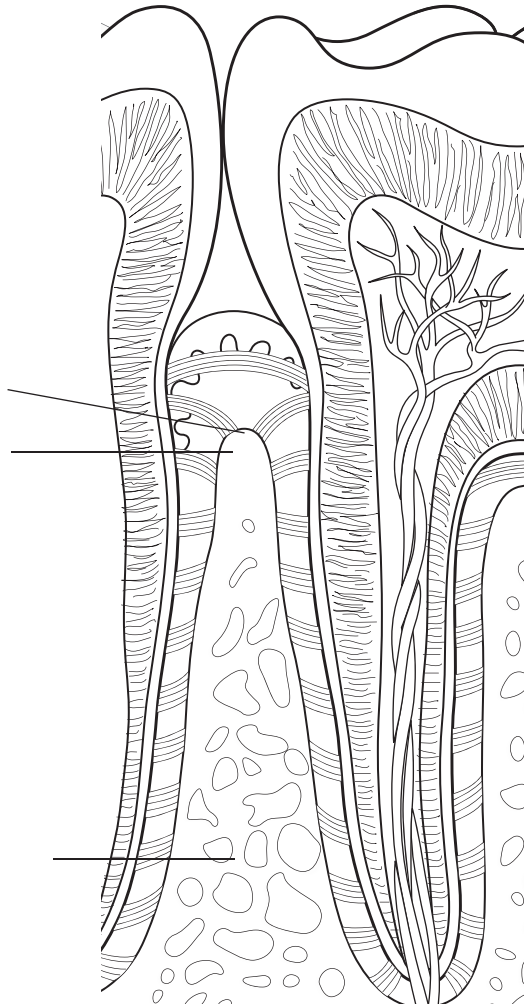


Periodontal Ligaments and Alveolar Crests

Identify and color the alveolar crest, alveolus, and interdental bone.

Mix and match:

- | | |
|---------------------------|---|
| 1. _____ alveolar process | A. surrounds the root of the tooth and the socket |
| 2. _____ alveolus | B. where two cortical bone plates come together between teeth |
| 3. _____ alveolar crest | C. tooth-bearing areas |



Cross Section of Mandibular Molar Tissues of the Tooth Identified

Label and color the following periodontal fiber groups: apical fiber group, horizontal fiber group, interradical septum, oblique fiber group, interdental fiber groups, and alveolar crest fiber group.

1. Describe the function of the apical fiber group.

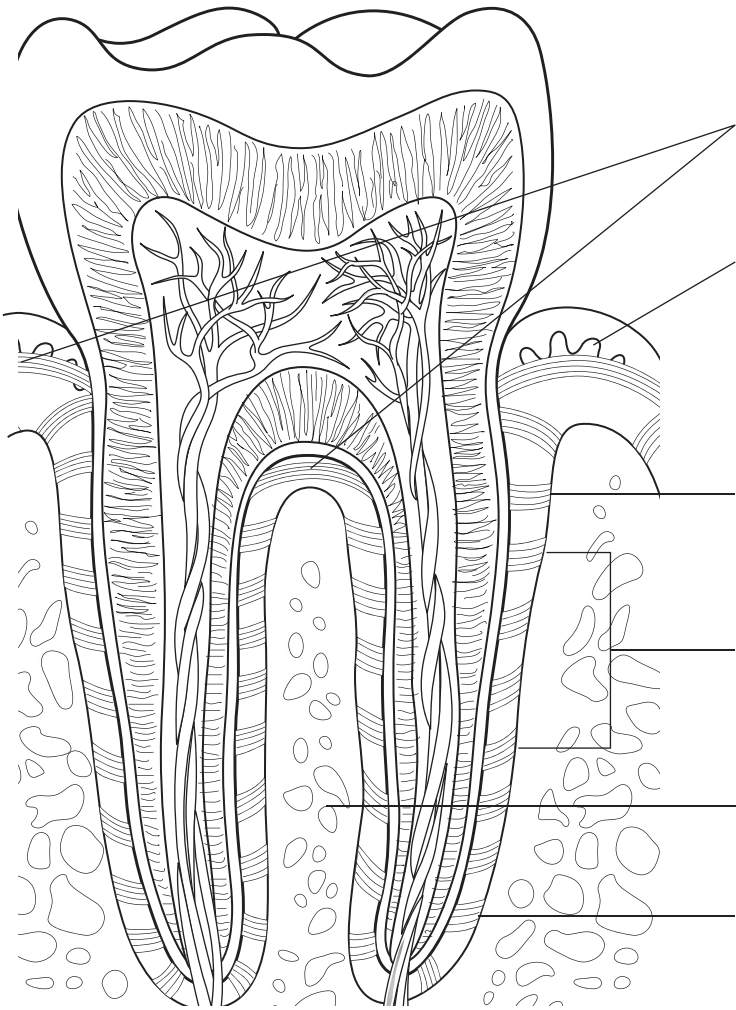
2. Describe the function of the oblique fiber group.

3. Describe the function of the horizontal fiber group.

4. Describe the function of the interradical fiber group.

5. Describe the function of the interdental ligament group.

6. Describe the function of the alveolar crest fiber group.



Gingival Fiber Groups

Label and color the four gingival fiber groups on the line art.

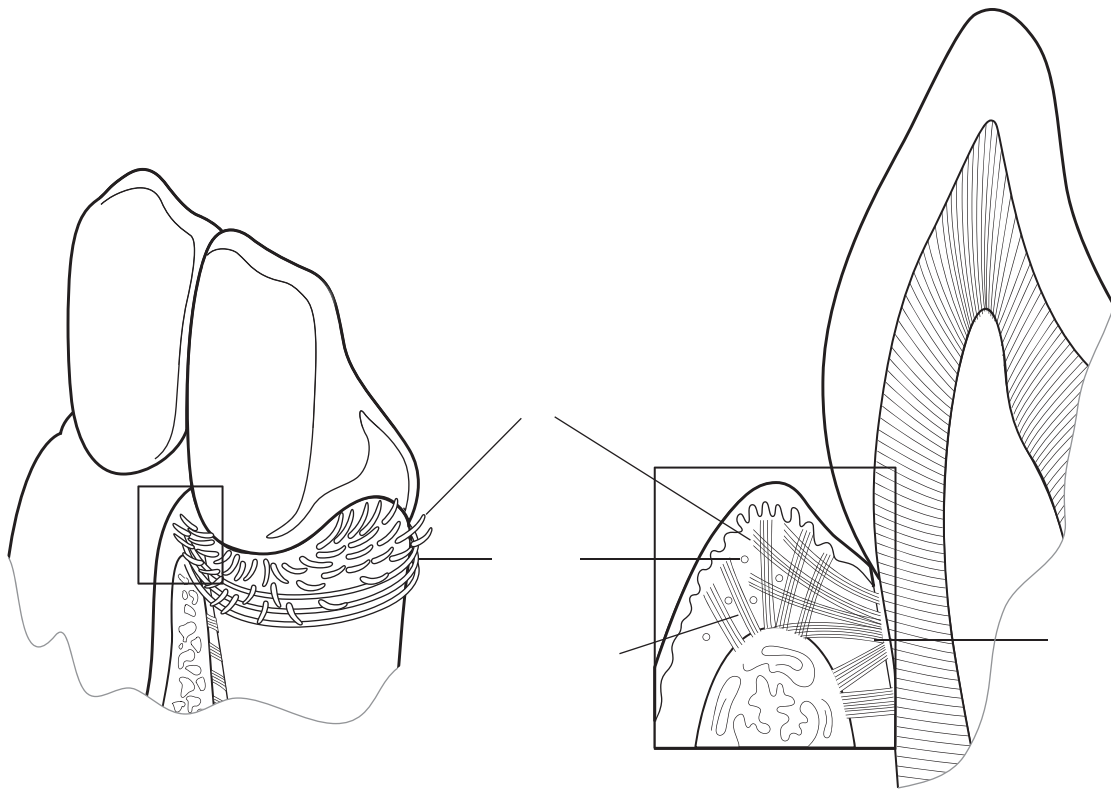
1. Where are the gingival fiber groups found?

2. What do the alveologingival fiber groups do?

3. What do the circular ligament fiber groups do?

4. What do the dentogingival fiber groups do?

5. What do the dentoperiosteal fiber groups do?



Periodontium

Identify the alveolar bone and color it tan.

Color the gingival crest and identify it with a red star.

Color the marginal gingiva and identify it with a yellow line.

Identify the mucogingival junction by drawing a line and marking the spot with a black star.

Color the attached gingiva and identify it with a blue line.

Color the gingival sulcus and identify it with a green star.

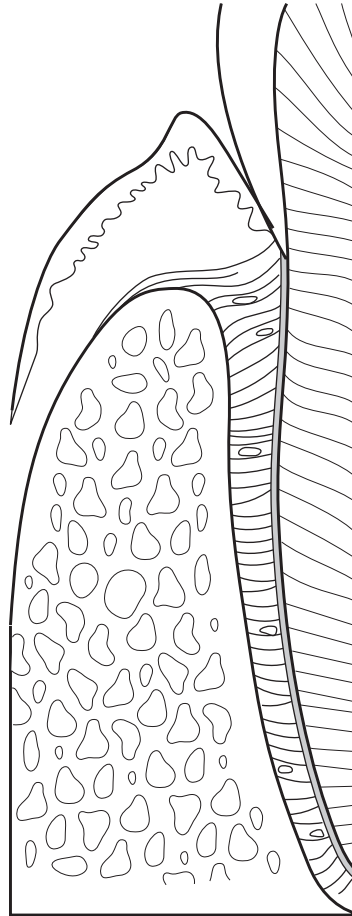
Color the epithelial attachment and identify it with an orange star.

Critical thinking:

1. When the wedge is placed, what tissue of the periodontium does it touch?

2. When a person flosses, what periodontal tissues might they touch with the floss?

3. When a person uses a toothbrush, which periodontal tissue would they normally brush? _____



Alveolar Mucosa

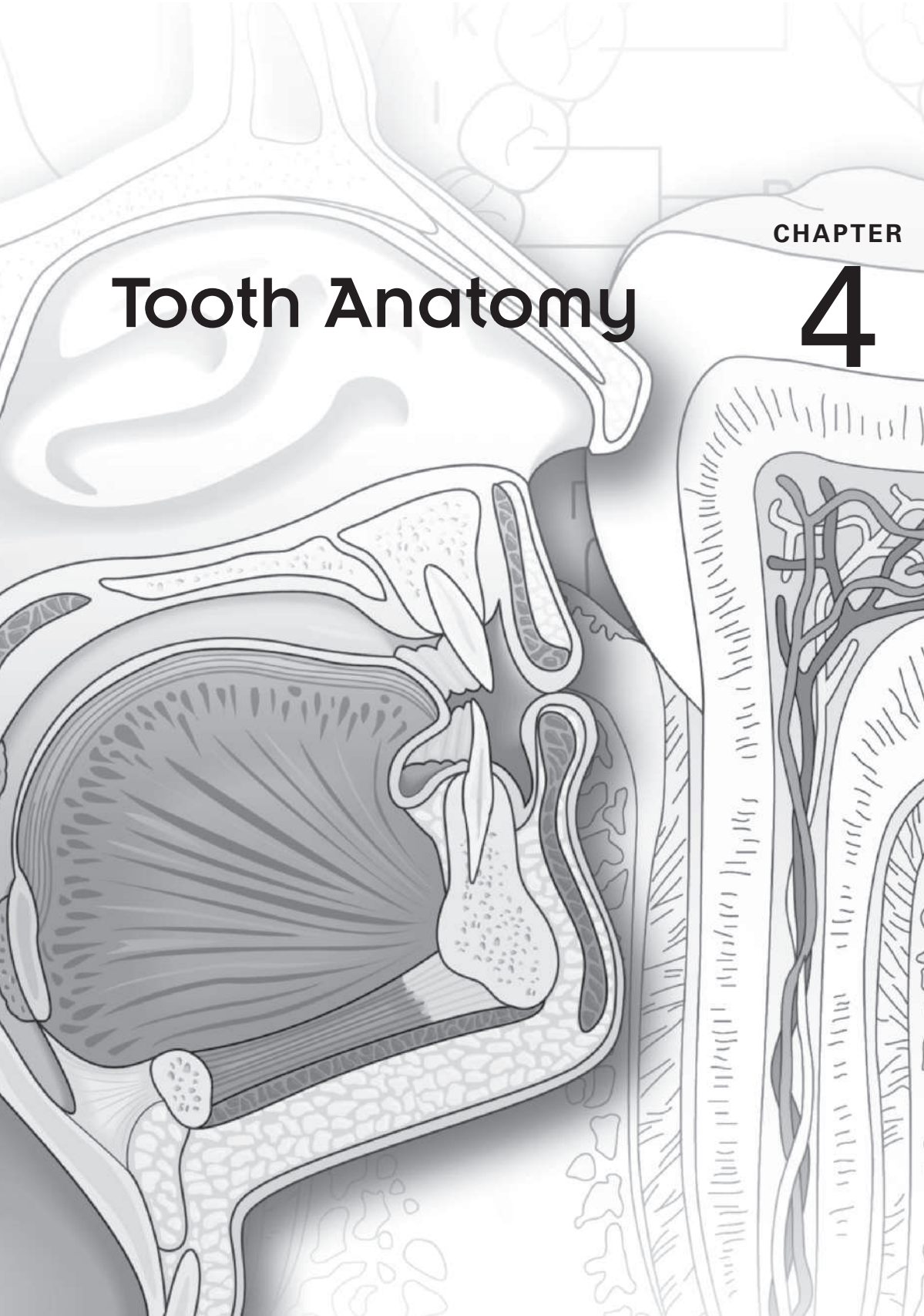
Identify the following on the line art: gingival groove, marginal gingiva, alveolar mucosa, interdental gingiva, attached gingiva, mucogingival junction. Color each of these gingival tissues on the photo.

Fill in the words (related to the periodontium):

1. _____ extends from the mucogingival junction to the gingival groove.
2. _____ is an extension of unattached gingiva between adjacent teeth.
3. _____ is the gingiva in the floor of the gingival sulcus.
4. _____ is the line of demarcation between the attached gingiva and the alveolar mucosa.
5. _____ is the line of demarcation between the attached gingiva and the marginal gingiva.
6. _____ is the space between the unattached gingiva and the tooth.



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Tooth Anatomy

CHAPTER

4

Adult Dentition

Draw a black line indicating the midline (median line) on the dentition.

Label the second bicuspid (premolars) and color them green.

Label the first molars and color them red.

Label the central incisors and color them yellow.

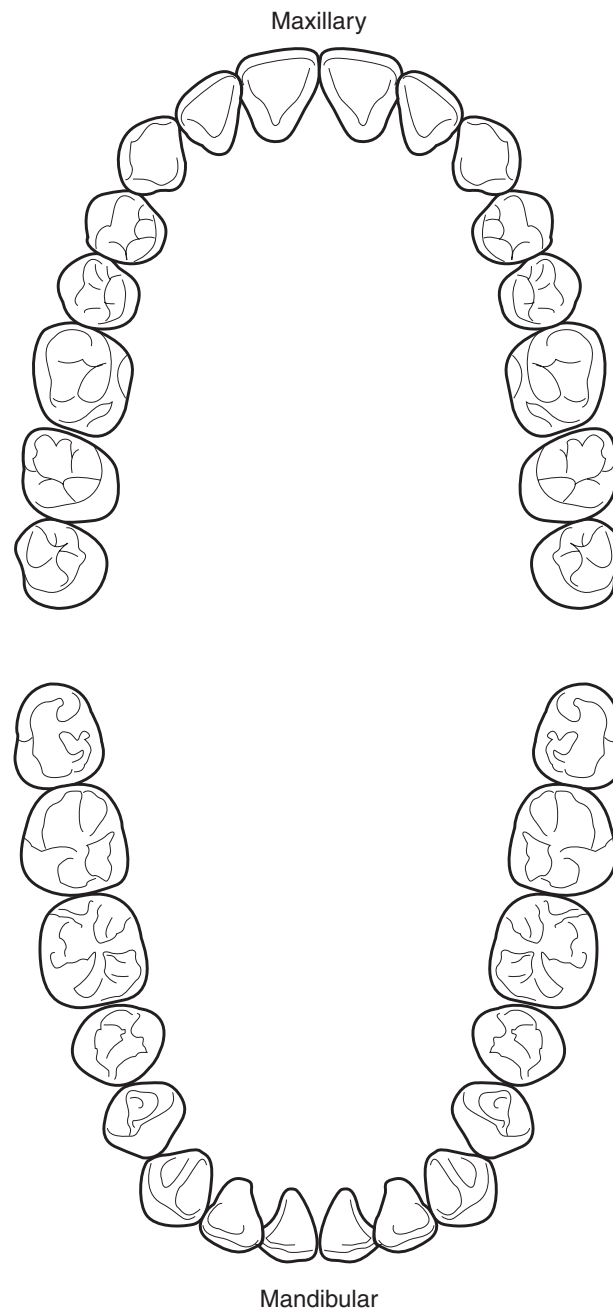
Label the cuspids (canines) and color them orange.

Label the first bicuspid (premolars) and color them blue.

Label the third molars and color them purple.

Label the lateral incisors and color them pink.

Label the second molars and color them grey.

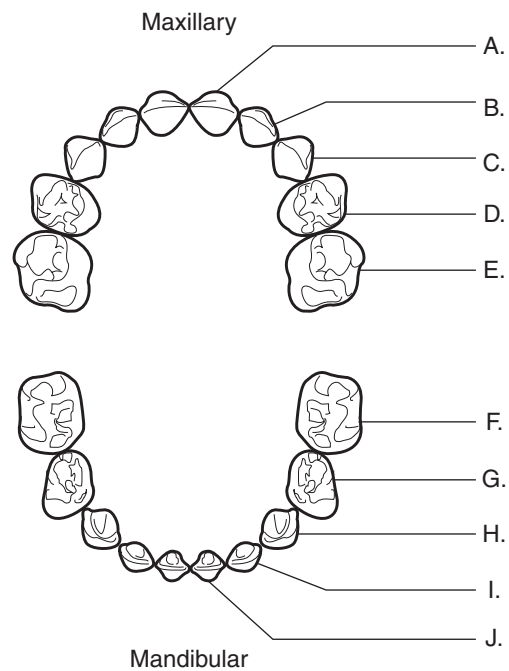


(A) Permanent dentition

Deciduous Dentition

Match the name of the tooth to the letter shown on the diagram. Label and color the tooth on the illustration.

1. _____ maxillary left deciduous cuspid
2. _____ mandibular left deciduous lateral incisor
3. _____ maxillary left deciduous first molar
4. _____ maxillary left deciduous central incisor
5. _____ maxillary left deciduous second molar
6. _____ maxillary left deciduous lateral incisor
7. _____ mandibular left deciduous central incisor
8. _____ mandibular left deciduous second molar
9. _____ mandibular left deciduous cuspid
10. _____ mandibular left deciduous first molar



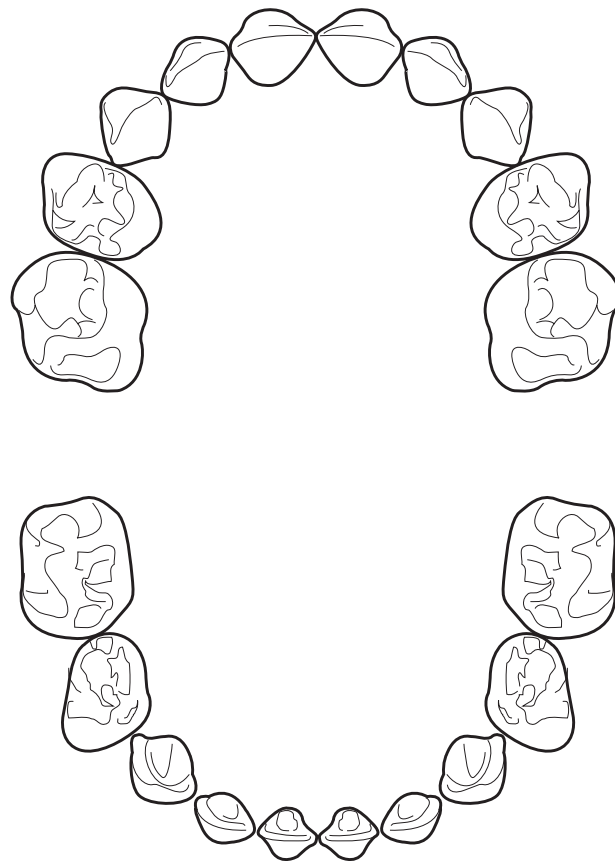
(B) Primary (deciduous) dentition

Primary Dentition

Draw the midline. (Recall that the midline is the imagery line that divides the dental arches into two halves.)

Draw a line that divides the dentition into two arches, creating four quadrants that have the same arrangement of teeth in each quadrant.

Color each of the similar teeth the same color in each quadrant.



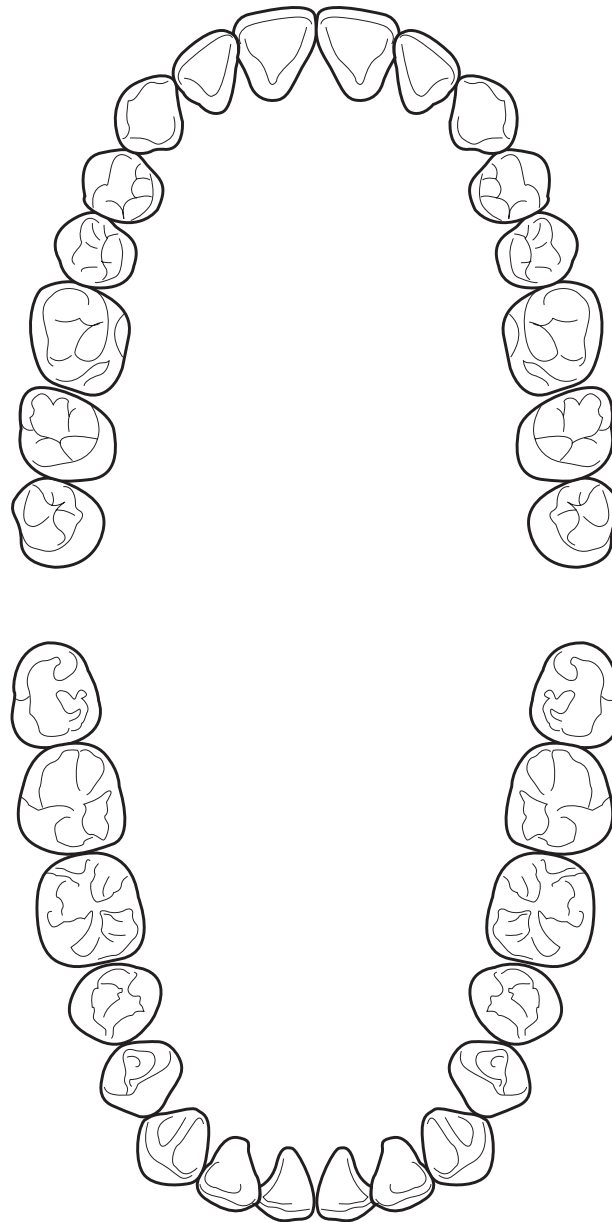
Permanent Dentition

Draw the midline. (Recall that the midline is the imagery line that divides the dental arches into two halves.)

Draw a line that divides the dentition into two arches, creating four quadrants that have the same arrangement of teeth in each quadrant.

Color each of the similar teeth the same color in each quadrant.

Label each quadrant with the correct name for the arch and either right or left.



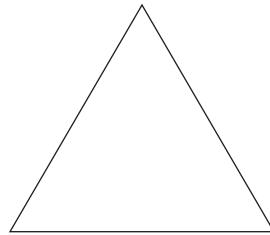
(A) Permanent dentition

Primary Teeth

Label and color the tooth on the diagram that is slightly more bulky in size and aids in tearing food. Color the triangle here the same color.

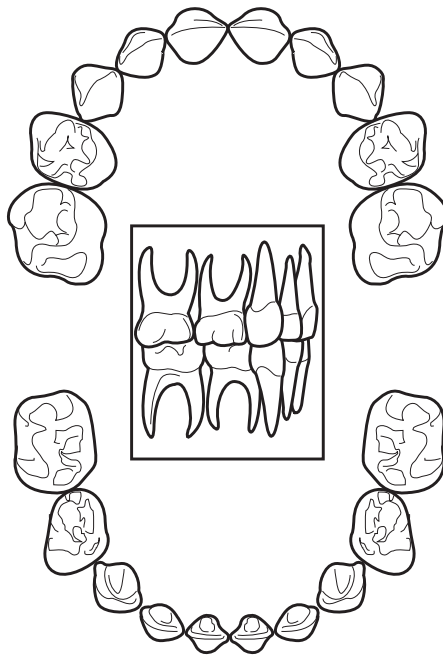
Label and color the tooth on the diagram that is used to cut or bite the food that is ingested. Color the triangle here the same color.

Label and color the tooth on the diagram that is the second tooth from the midline and is also used to cut food. Color the triangle here the same color.



Label and color the tooth on the diagram that is used to chew food and is furthest away from the midline. Color the triangle here the same color.

Label and color the tooth on the diagram that is used to chew food and is closer to the midline than the other one it closely resembles. Color the triangle here the same color.



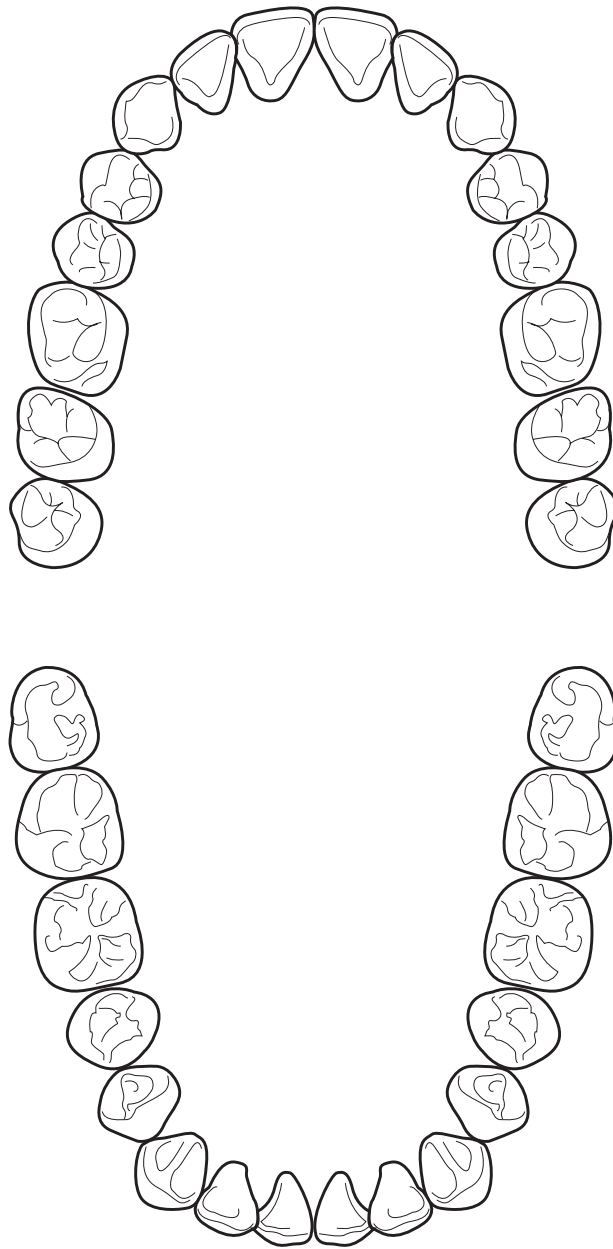
Permanent Dentition

Color each of the anterior teeth on the diagram on the following page in one color.

Identify that color here. _____

Color each of the posterior teeth on the diagram on the following page in another color.

Identify that color here. _____



Permanent Dentition

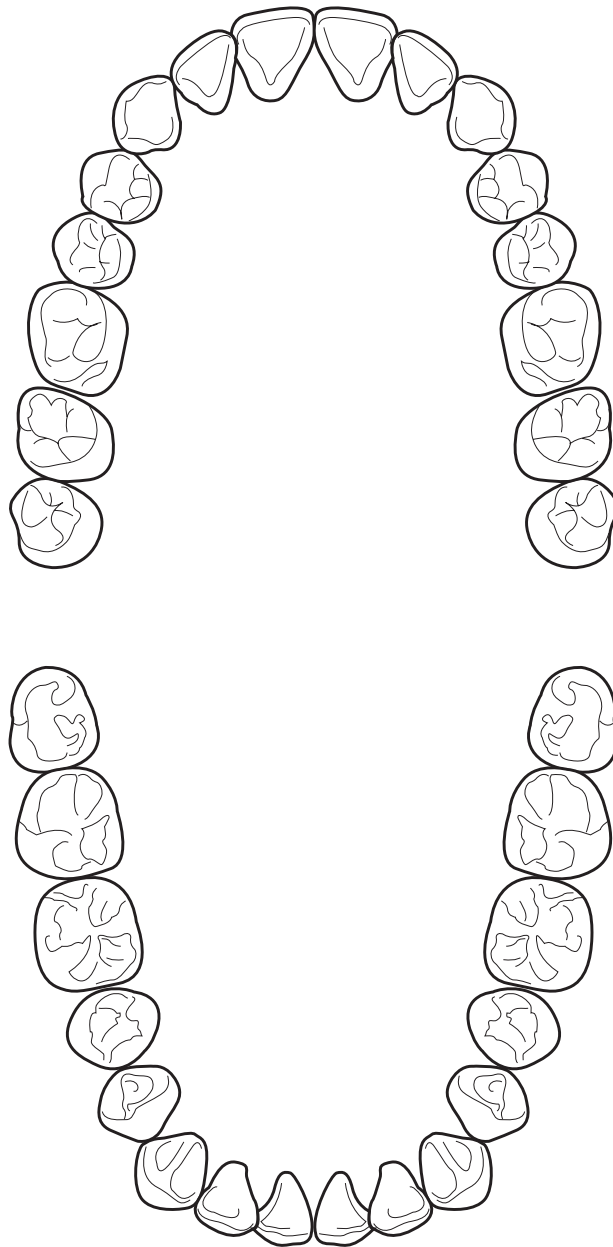
On the maxillary right quadrant, posterior teeth color a line of red on the buccal side.

On the maxillary right quadrant, posterior teeth color a line of blue on the occlusal surface.

On the maxillary right quadrant, posterior teeth color a line of green on the lingual surface.

On the mandibular left quadrant and the mandibular right quadrant, anterior teeth color the incisal edge in red.

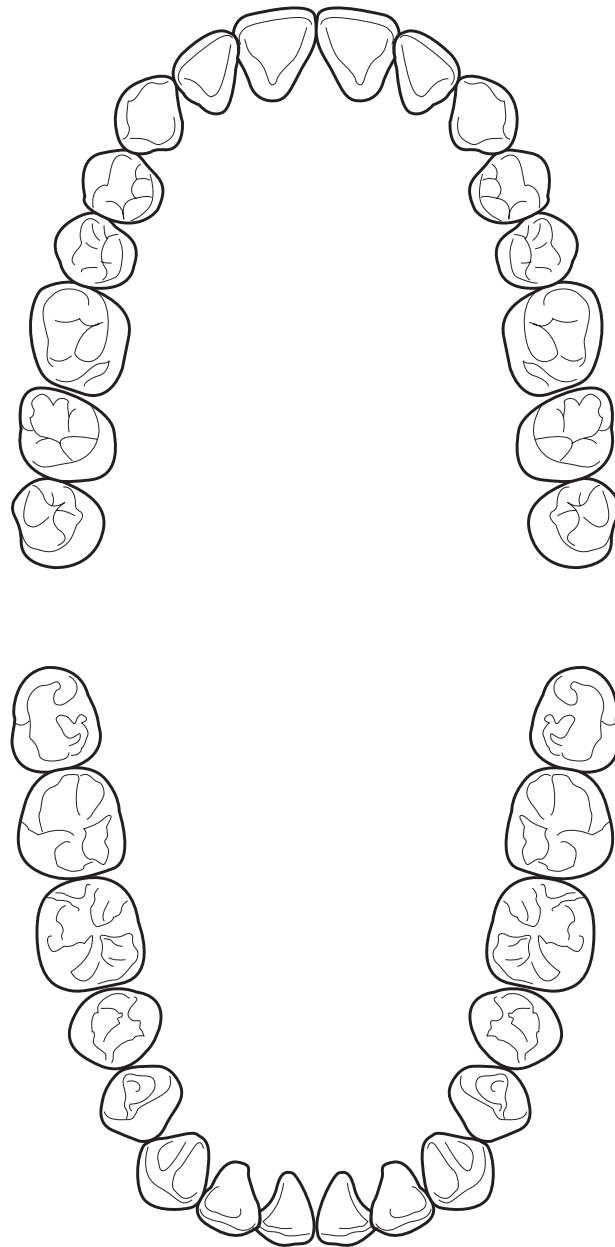
On the mandibular left quadrant and the mandibular right quadrant, anterior teeth color a line of blue on the lingual surface.



Permanent Dentition

On each of the teeth place a line of the color red on the mesial surface.

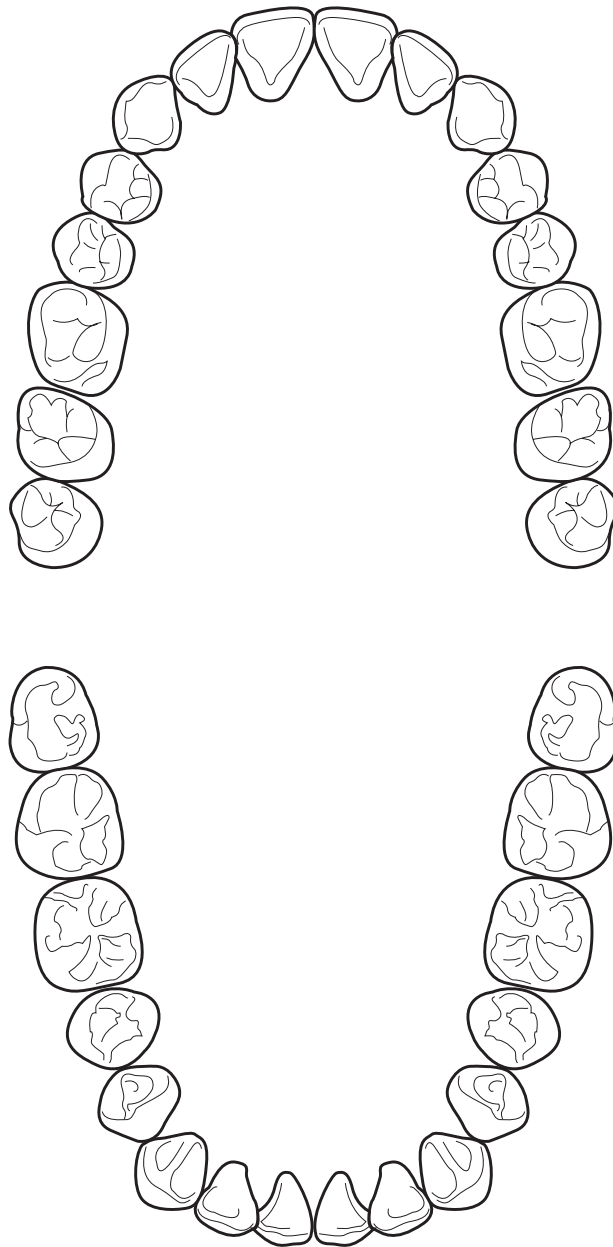
On each of the teeth place a line of the color blue on the distal surface.



Permanent Dentition

Match the tooth surface to the definition. Label and color the surface on the illustration.

- | | |
|-----------------------|---|
| 1. _____ mesial | A. the surface away from the midline |
| 2. _____ distal | B. the “outside” surface, toward the cheek |
| 3. _____ lingual | C. the pulverizing or chewing surface |
| 4. _____ buccal | D. on the maxillary arch, another name for the lingual side |
| 5. _____ occlusal | E. the surface toward the midline |
| 6. _____ labial | F. the “inside” surface, toward the tongue |
| 7. _____ incisal edge | G. the biting or cutting edge |
| 8. _____ palatal | H. the “outside” surface, which is toward the lips |

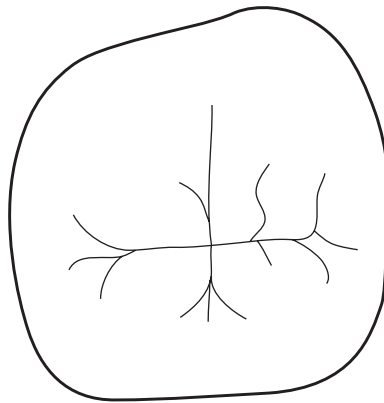


Anatomical Structures

Label and color the following landmarks on the illustration of the mandibular second molar:

- Transverse ridge
- Supplemental grooves
- Marginal ridges
- Fissure

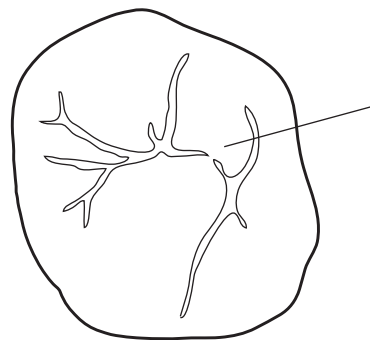
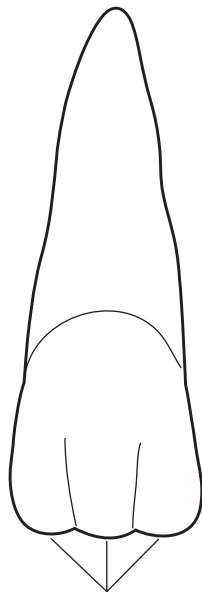
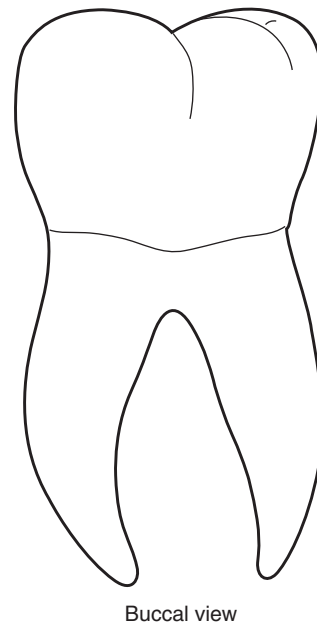
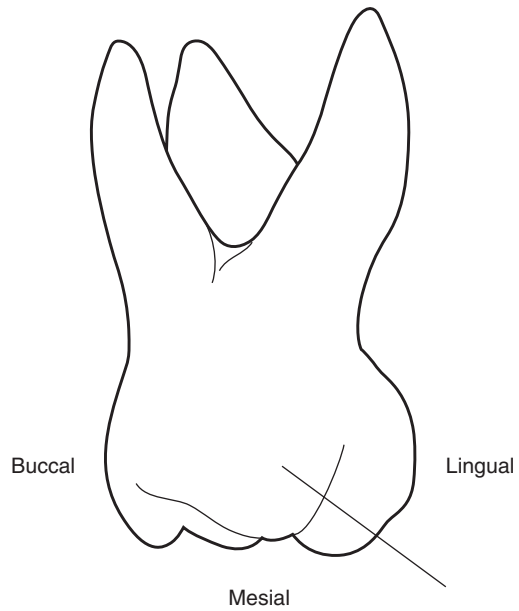
Mandibular second molar



Anatomical Landmarks

Label and color the following anatomical landmarks on the correct teeth:

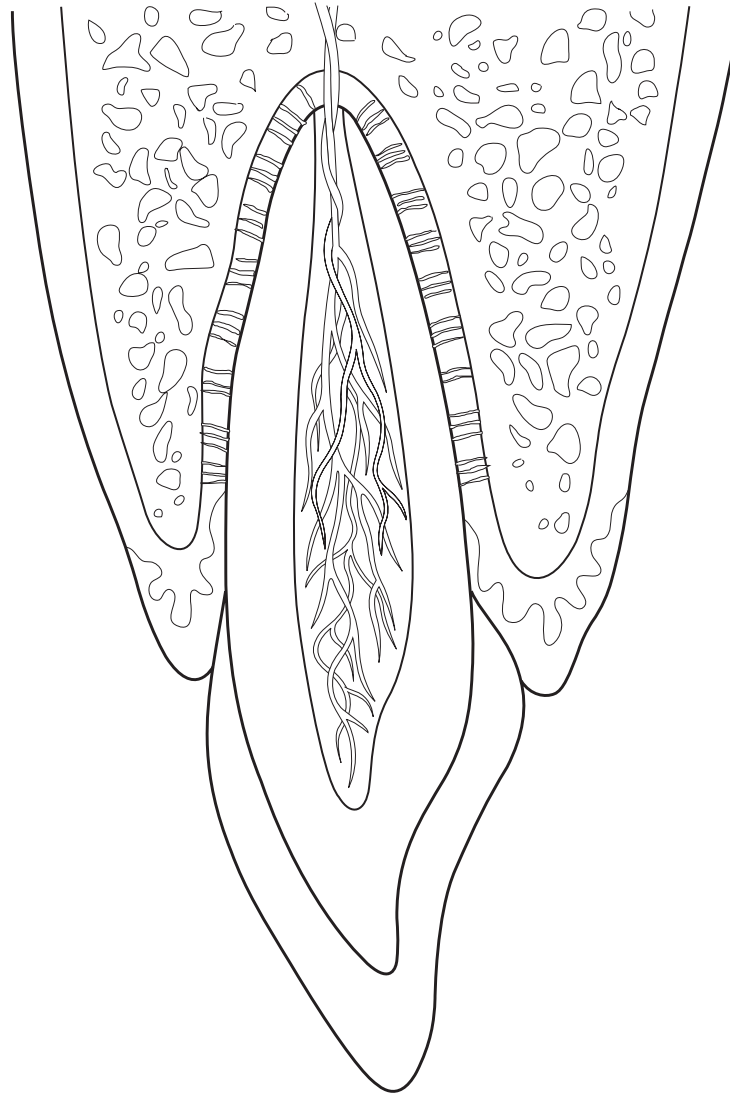
- Mamelons
- Cusp of Carabelli
- Oblique ridge
- Bifurcated roots



Anatomical Landmarks

Match the structure to the definition. Label and color the structure on the illustration.

- | | |
|-------------------------|---|
| 1. _____ apical foramen | A. the convex area on the lingual surface of the anterior teeth |
| 2. _____ cingulum | B. an opening in the end of the tooth through which nerve and blood vessels enter |
| 3. _____ pulp | C. the hardest structure of the tooth |
| 4. _____ dentin | D. the root area covering the dentin |
| 5. _____ enamel | E. the structure of the tooth that makes up the largest part |
| 6. _____ cementum | F. the blood and nerve vessels of the tooth |

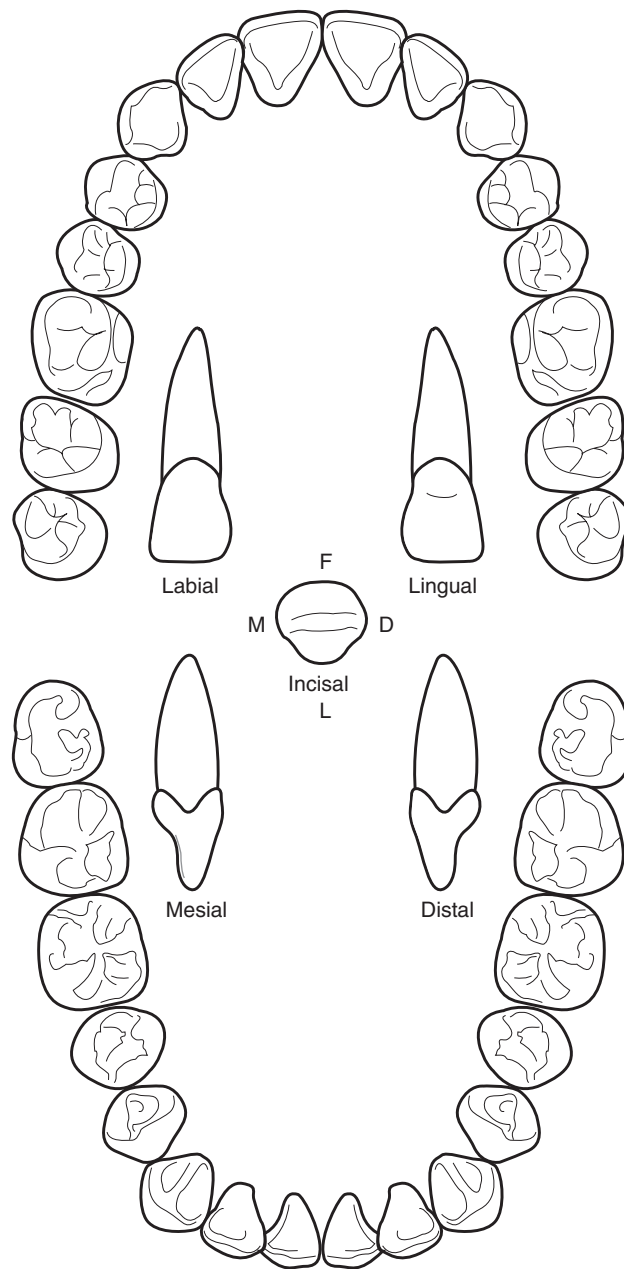


Maxillary Central Incisors

Label and color the maxillary central incisors.

Circle all that apply for the central incisor:

- shortest crown in maxillary arch
- has imbrication lines
- second tooth from the midline
- has five lobes
- first tooth from the midline
- play an important part in appearance
- do not play an important part in speech
- longest crown in maxillary arch
- play an important part in speech
- used for cutting food
- mesial surface is longer than the distal surface
- used for chewing food
- when erupted it has mamelons
- lingual surface convex
- root inclines slightly to the distal
- root inclines slightly to the mesial
- labial surface convex
- has a cingulum
- root is 1½ the size of the crown
- mesial angle is rounded
- one root
- blunt apex
- does not have a cingulum
- distal surface is longer than the mesial surface
- mesial angle is acute
- root is as long as the crown

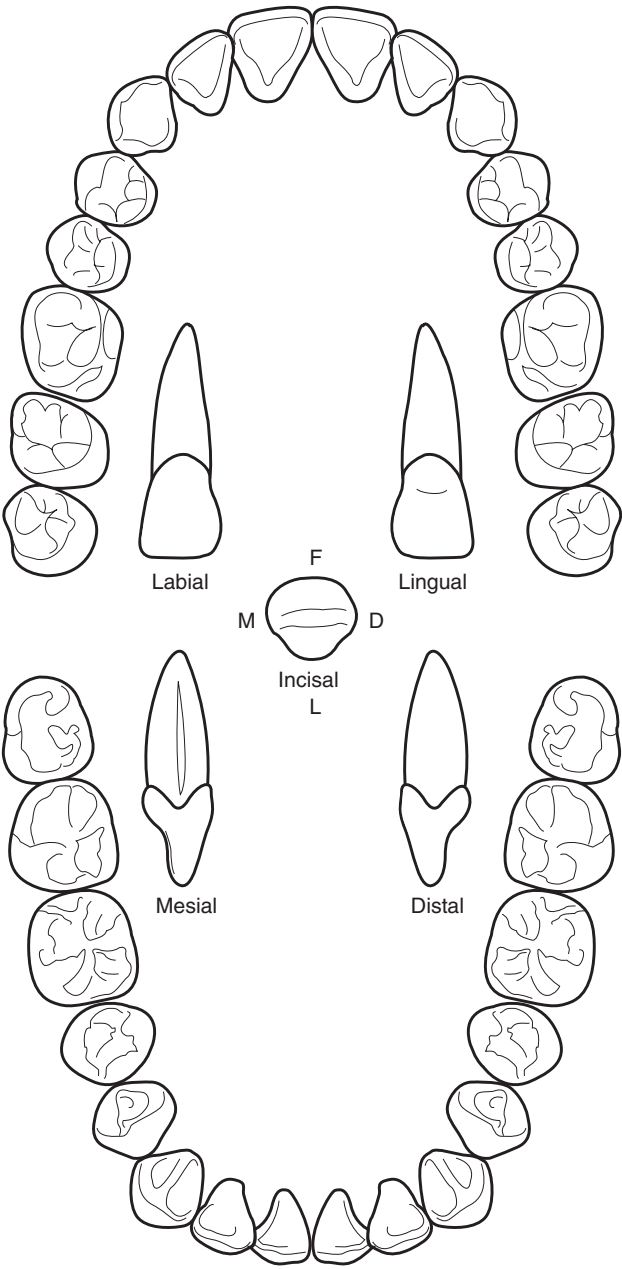


Maxillary Lateral Incisors

Label and color the maxillary lateral incisors.

Mix and match:

- | | |
|----------------------|---|
| 1. _____ agenesis | A. extreme variations from the norm |
| 2. _____ peg lateral | B. diminutive smooth surface crown lacking contacts |
| 3. _____ anomalies | C. congenitally missing |

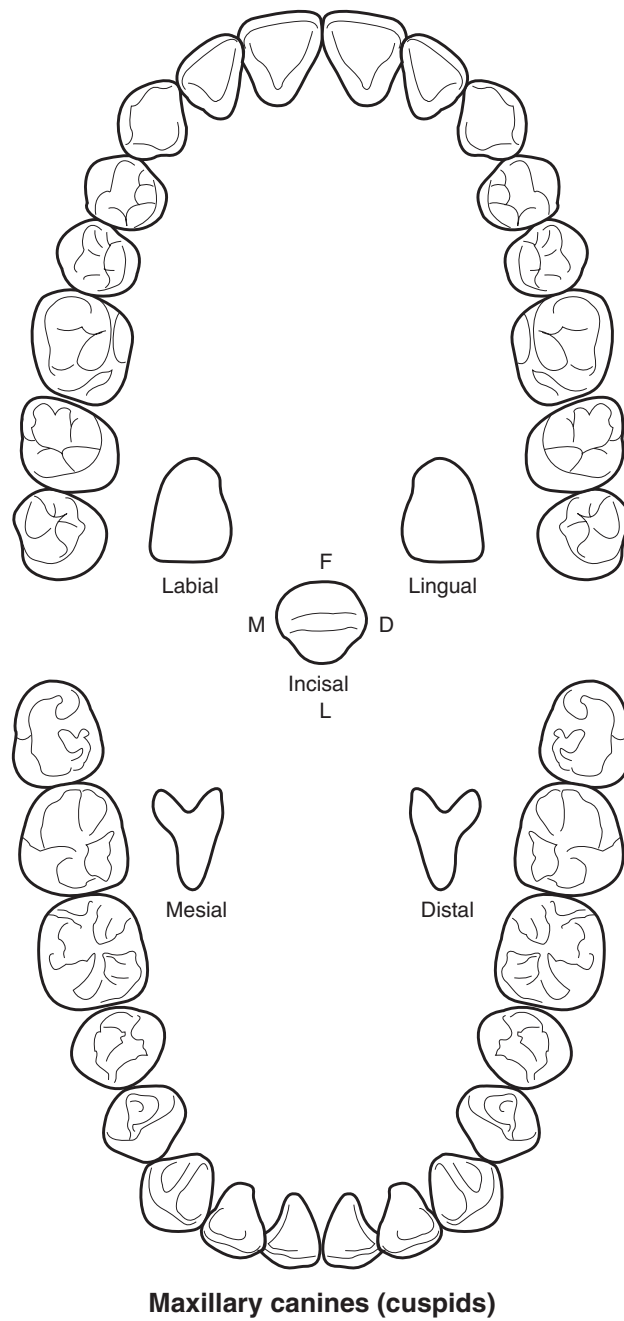


Maxillary Canine

Label and color the maxillary canines.

Draw the roots on the crowns pictured of the four views of the maxillary canine.
Color these views.

1. The maxillary canine is often called _____.
2. The purpose of the canine is to _____.
3. The root is the _____ in the maxillary arch.



Maxillary First Bicuspid (Premolar)

Label and color the maxillary first bicuspid.

Circle all that are true about the maxillary first bicuspid:

cusps come together on the occlusal surface in a central groove

it is bifurcated

posterior tooth

function is to tear food

lingual cusp is longer than the buccal

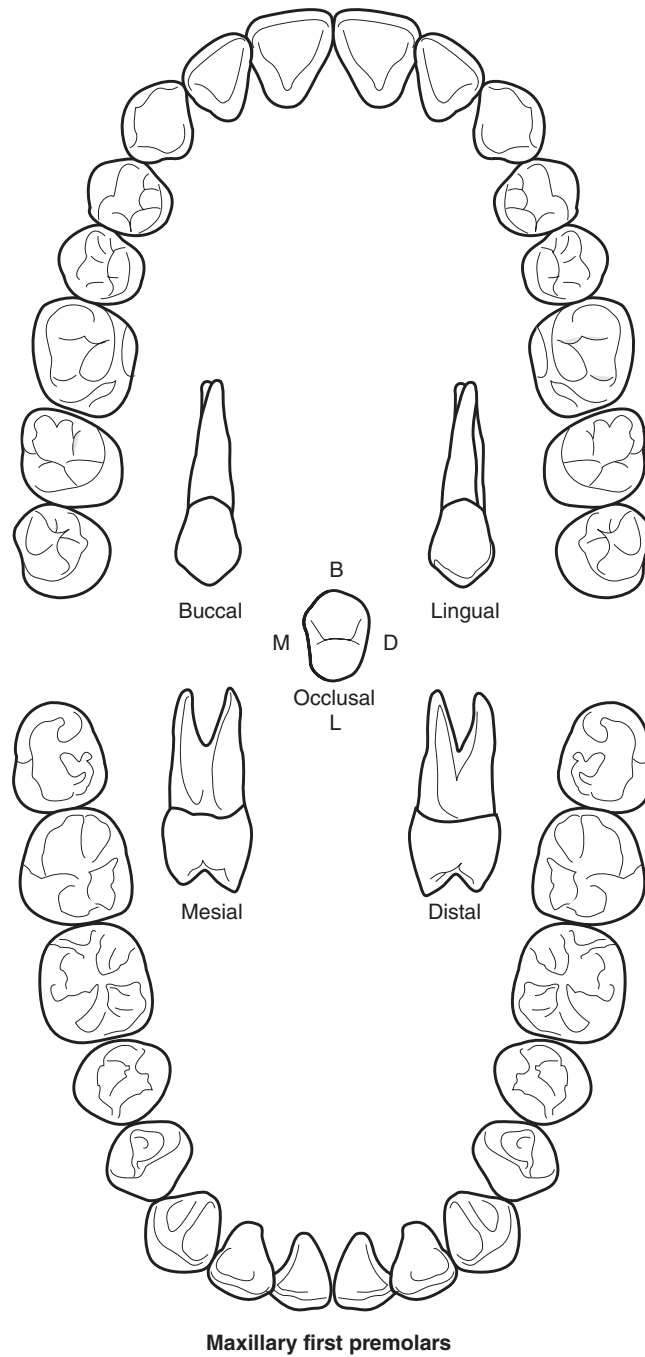
roots are longer than the cuspid

function is to pulverize food

anterior tooth

removed for orthodontics sometimes

buccal cusp is longer than the lingual

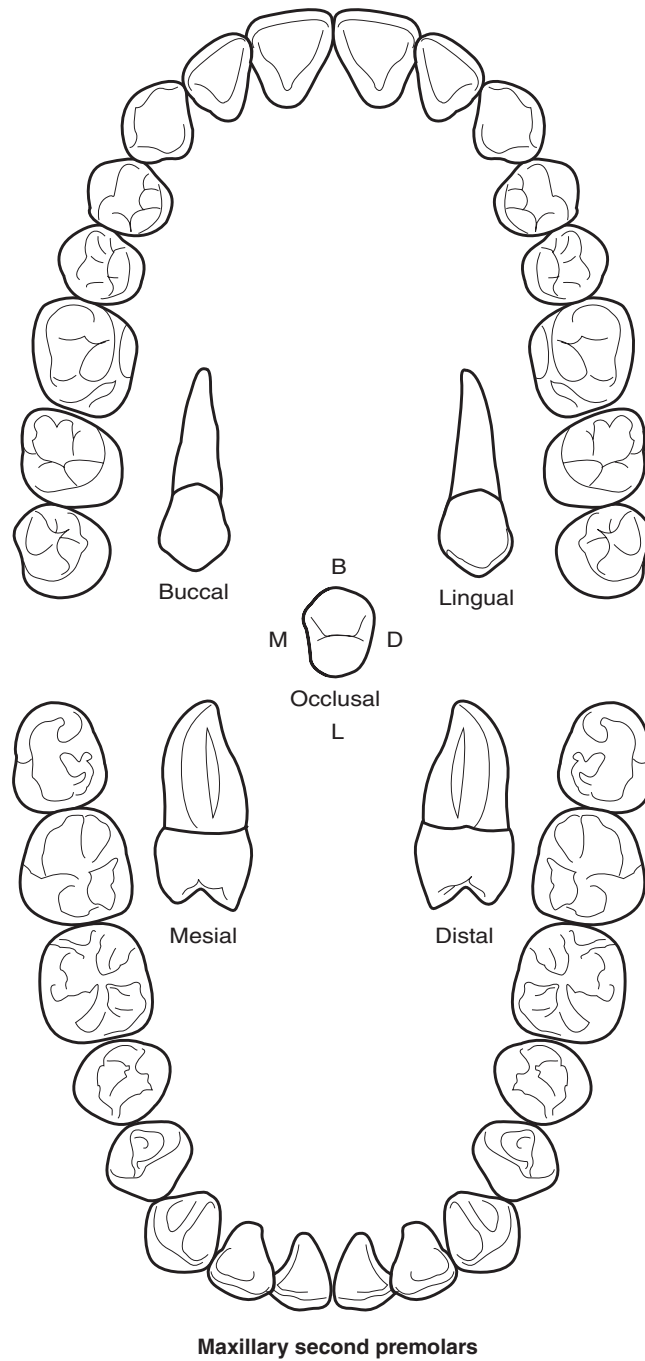


Maxillary Second Bicuspid (Premolar)

Label and color the maxillary second bicuspid (premolars).

True or false:

1. _____ the maxillary second bicuspid (premolar) is larger than the first bicuspid (premolar).
2. _____ the maxillary second bicuspid (premolar) is bifurcated.
3. _____ the maxillary second bicuspid (premolar) has two root canals.
4. _____ the maxillary second bicuspid (premolar) is more narrow mesial-distally than the first premolar.
5. _____ the buccal cusp is slightly shorter than the lingual cusp.

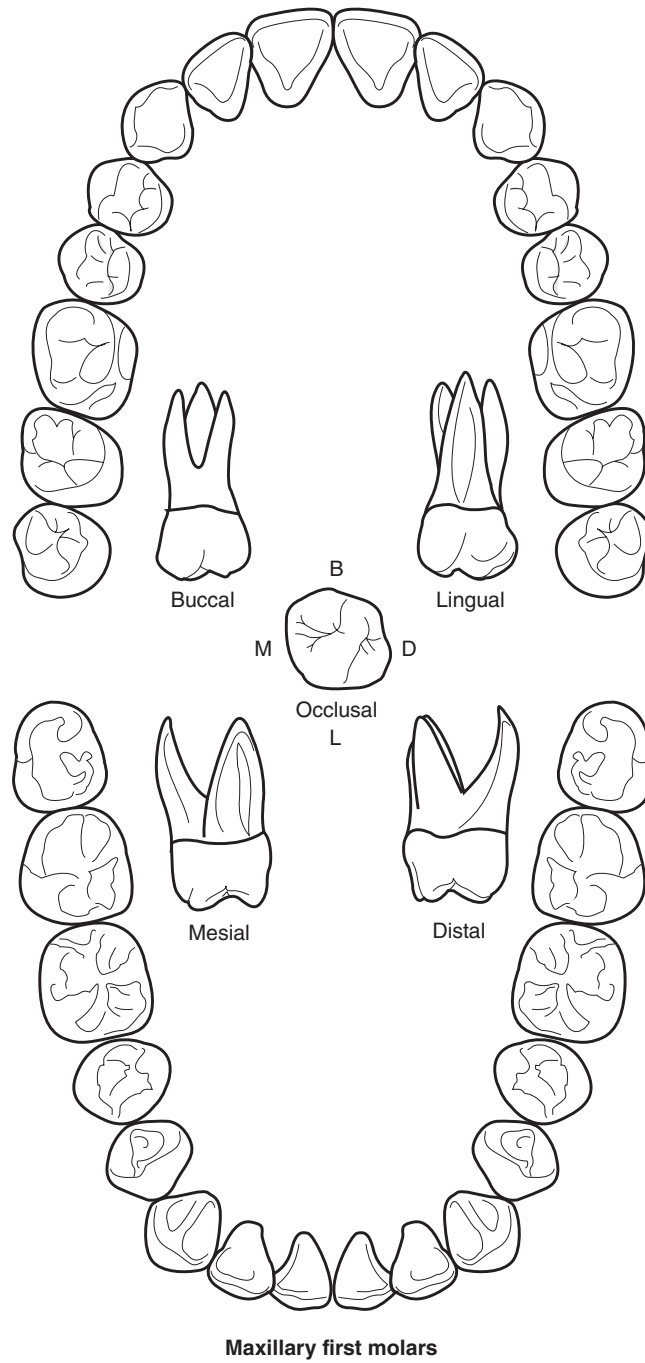


Maxillary First Molar

Label and color the maxillary first molar.

Mark the best answer about the maxillary first molar.

1. _____ single root _____ bifurcated _____ trifurcated
2. _____ erupts at 6 years of age _____ erupts at 12 years
of age _____ erupts at 18 years of age
3. _____ tears _____ pulverizes _____ chews
4. _____ three cusps _____ four cusps _____ five cusps
5. _____ cusp of Carabelli _____ no cusp of Carabelli
6. _____ roots together _____ roots spread apart

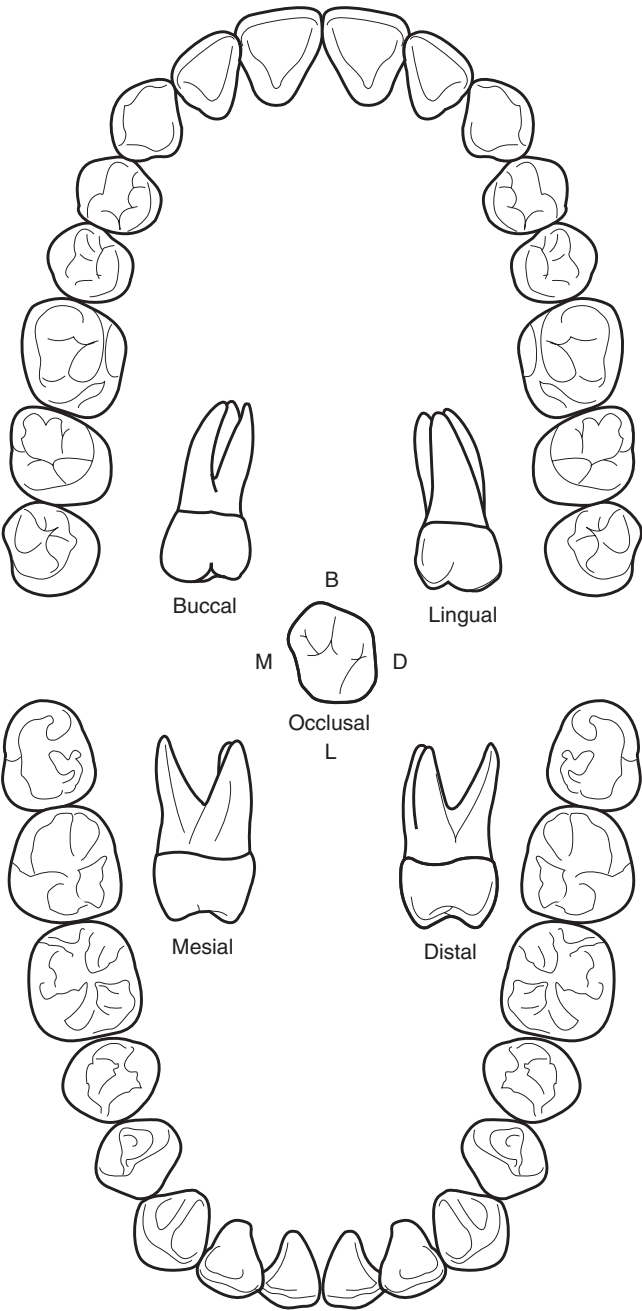


Maxillary Second Molar

Label and color the maxillary second molar.

Fill in the blanks:

1. The maxillary second molar has _____ cusps.
2. The maxillary second molar has _____ roots.
3. The maxillary second molar is (larger/smaller) _____ than the first molar.
4. The maxillary second molar erupts when you are _____ years of age.
5. The word molar is derived from the Latin word *molaris*, referring to a _____.



Maxillary second molars

Maxillary Third Molar

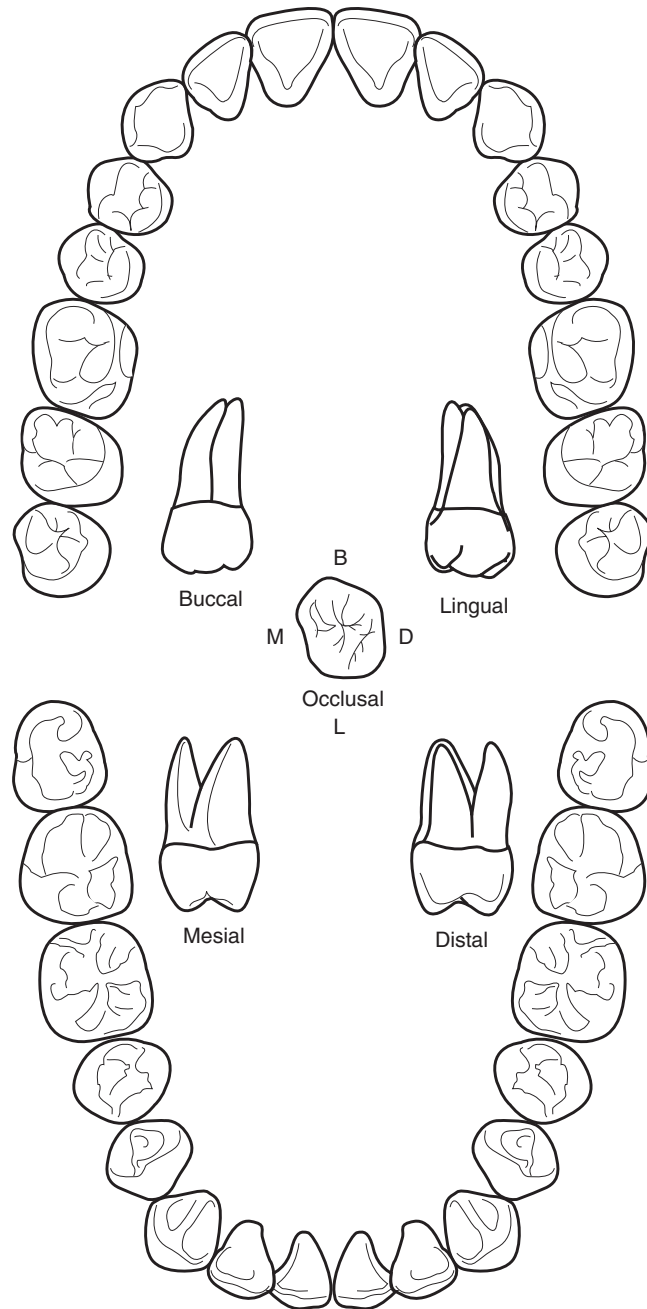
Label and color the maxillary third molar.

Fill in the blanks:

1. The maxillary third molar erupts when you are _____ of age.
2. The maxillary third molar is referred to as the _____ tooth.

Why?

3. Do all humans develop maxillary third molars? _____
4. The occlusal surface of the maxillary third molar is more wrinkled in appearance due to many more _____ grooves.
5. The dentist often times recommends that this tooth be _____.

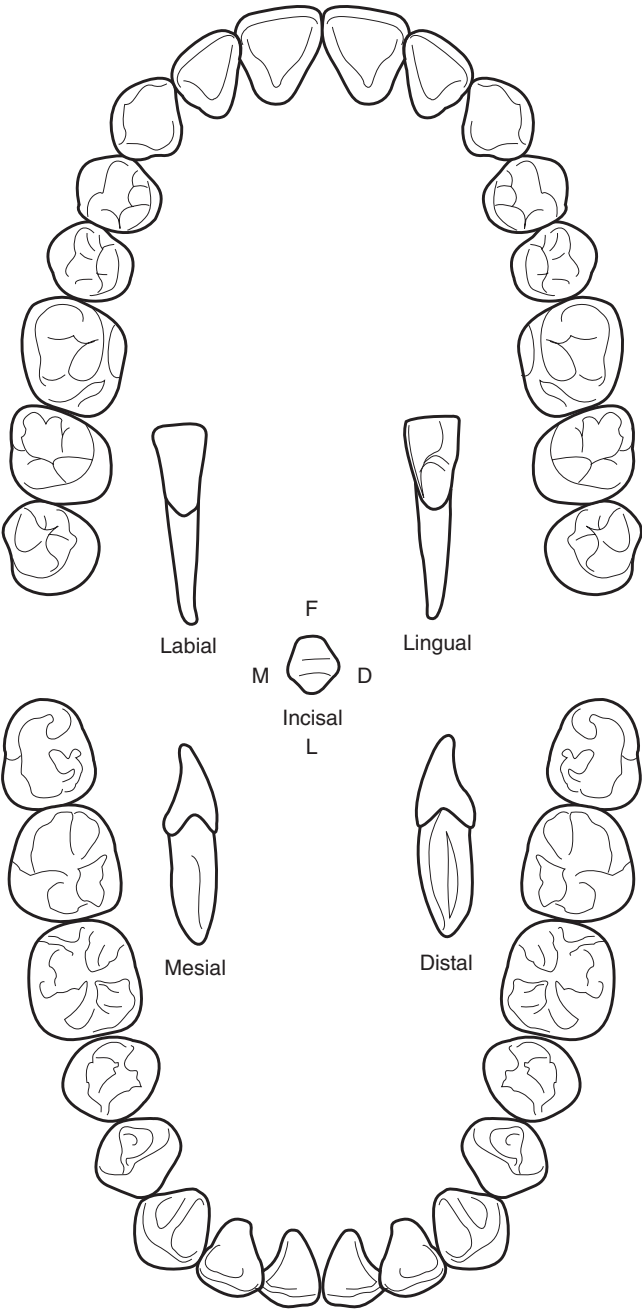


Mandibular Central Incisors

Label and color the mandibular central incisors.

Fill in the blank with maxillary, mandibular, or both.

1. _____ central incisors are smaller than the laterals
2. _____ central incisors are smallest tooth in the mouth
3. _____ central incisors are smallest tooth in the dentition
4. _____ central incisors have three mamelons on the incisal edge when erupts
5. _____ touches the mesial surface of the other central incisor

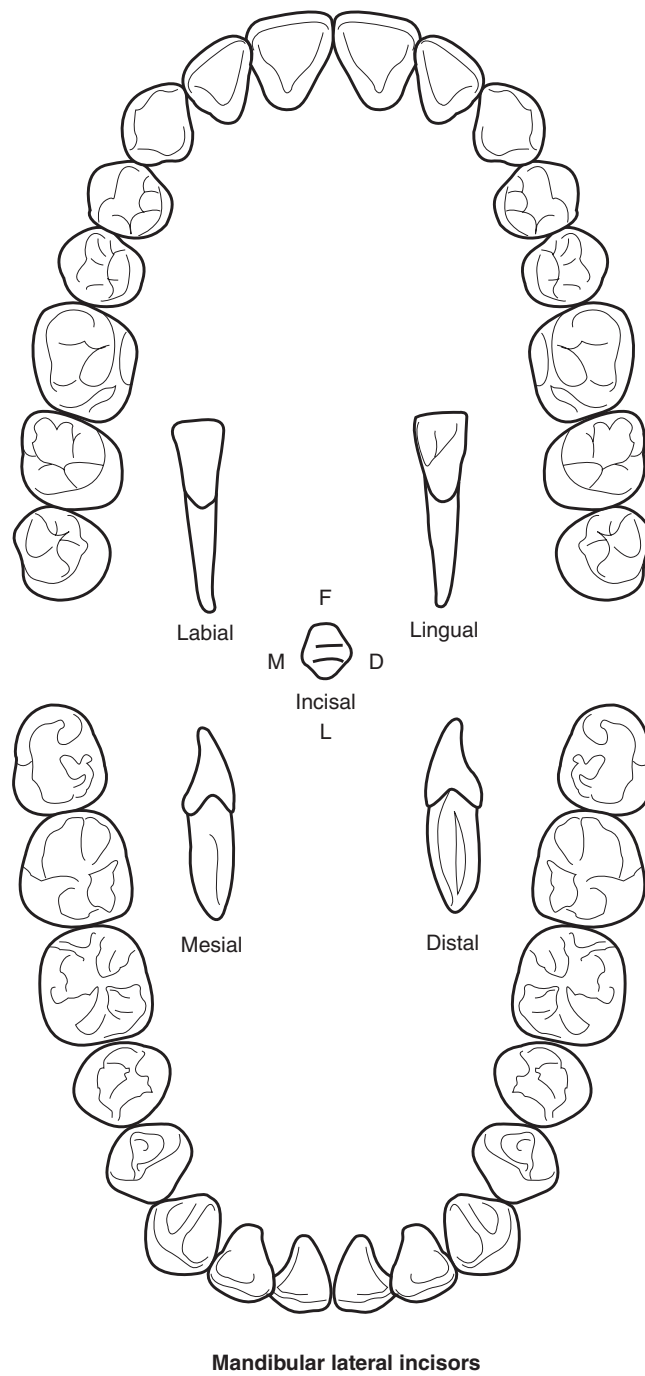


Mandibular Lateral Incisors

Label and color the mandibular lateral incisors.

True or false:

1. _____ mandibular lateral incisor resembles that of the mandibular central incisor.
2. _____ mandibular lateral incisor slightly larger than the mandibular central incisor.
3. _____ mandibular lateral incisor root is slightly shorter than the mandibular central incisor.
4. _____ mandibular lateral incisor has the same developmental abnormalities as the maxillary lateral.



Mandibular Cuspids

Label and color the mandibular cuspids.

Circle all of the true statements about the mandibular cuspids:

third tooth from the midline

not as well developed as the maxillary canine

root is longer than the maxillary canine

not as sharp on the tip of the apex

designed to chew food

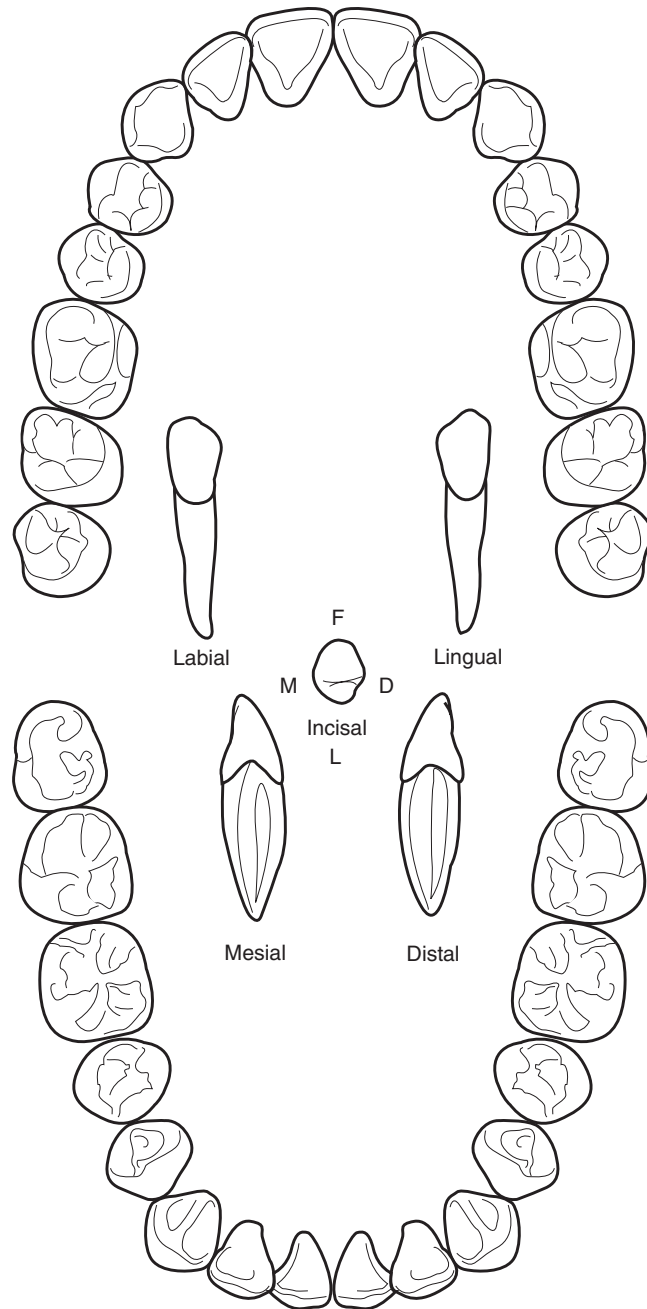
mesial cusp slope is longer than the distal cusp slope

longest tooth in the mandibular arch

bifurcated

one canal in the root

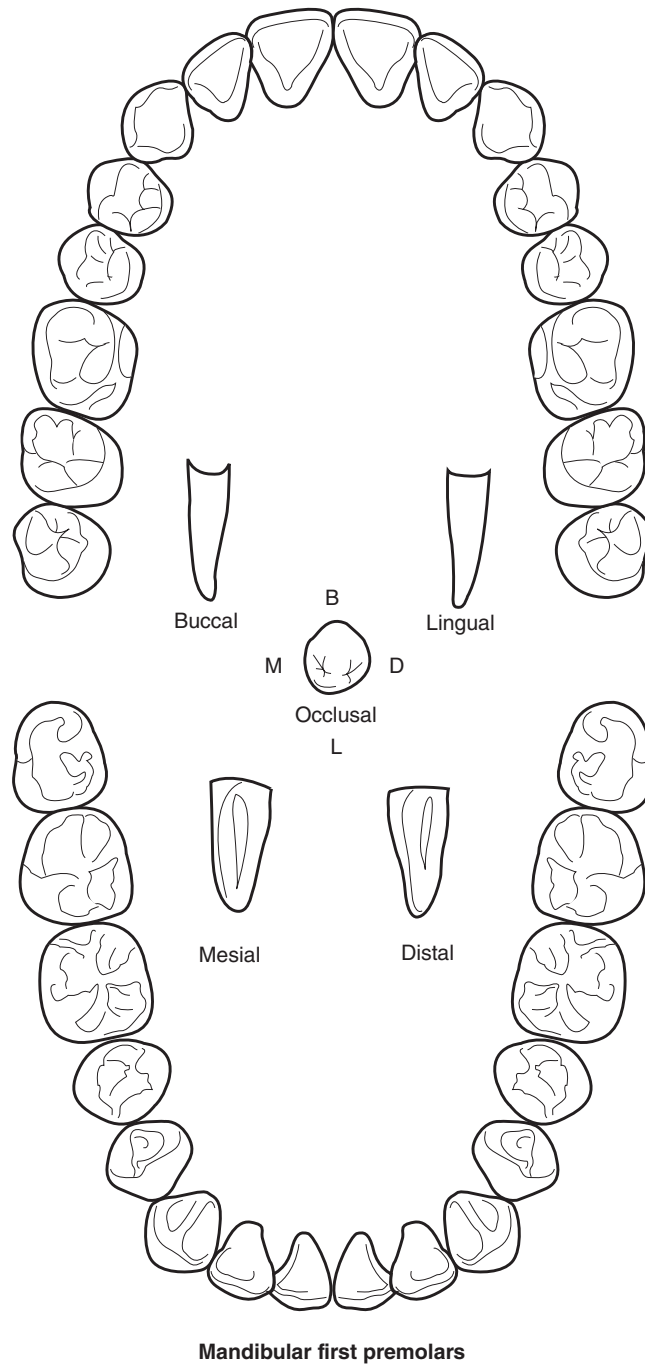
cornerstone for the mandibular arch



Mandibular First Bicuspid (Premolars)

Label and color the mandibular first bicuspid.

Draw the crowns on the roots of the four views shown in the line drawing of the mandibular first bicuspid (premolar). Color the views of the teeth shown from five surfaces. Color the mesial view green, the distal view red, the occlusal view orange, the buccal view blue, and the lingual view yellow.

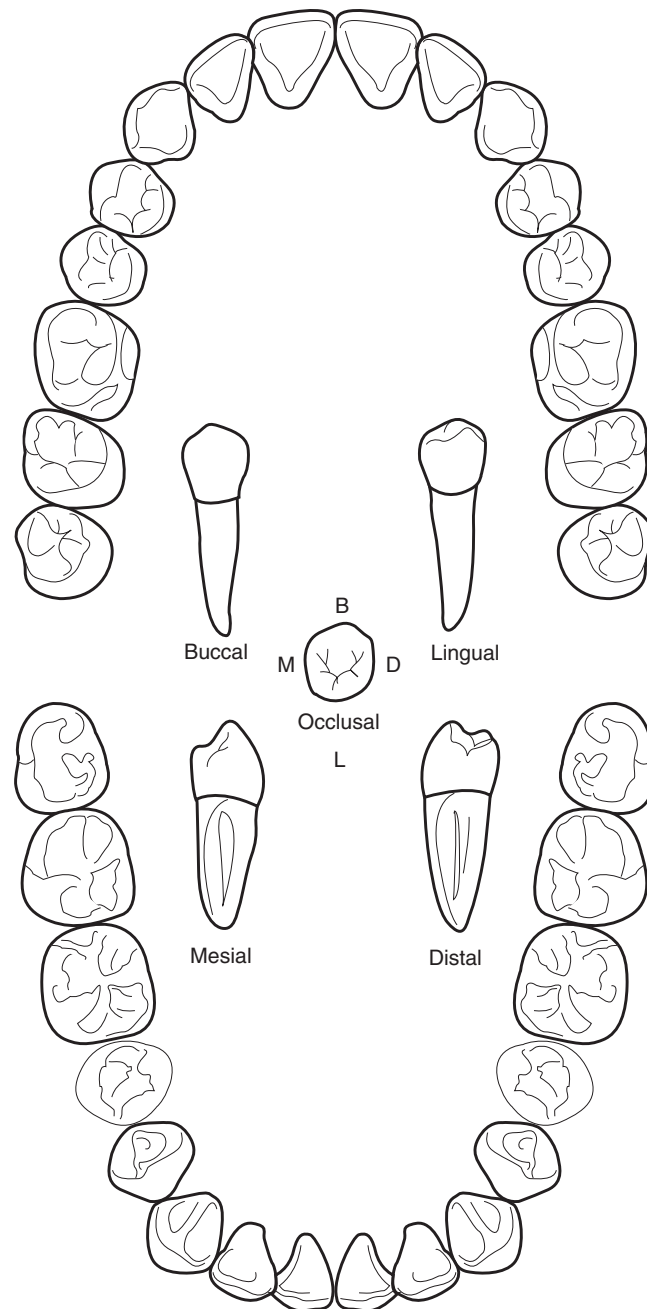


Mandibular Second Bicuspid (Premolars)

Label and color the mandibular second bicuspid.

Mix and match:

- | | |
|------------------------------------|---|
| 1. _____ buccal side | A. cusps more developed than first bicuspid |
| 2. _____ maxillary cuspid | B. one cusp |
| 3. _____ lingual side | C. root is shorter than |
| 4. _____ mandibular first bicuspid | D. root is longer than |



Mandibular First Molar

Label and color the mandibular first molars.

Color a red box around each item that refers to mandibular first molar.

Color a blue box around each item that refers to maxillary first molar.

Color a green box around each item that refers to both maxillary and mandibular first molars.

single root bifurcated trifurcated erupts 6 yrs of age

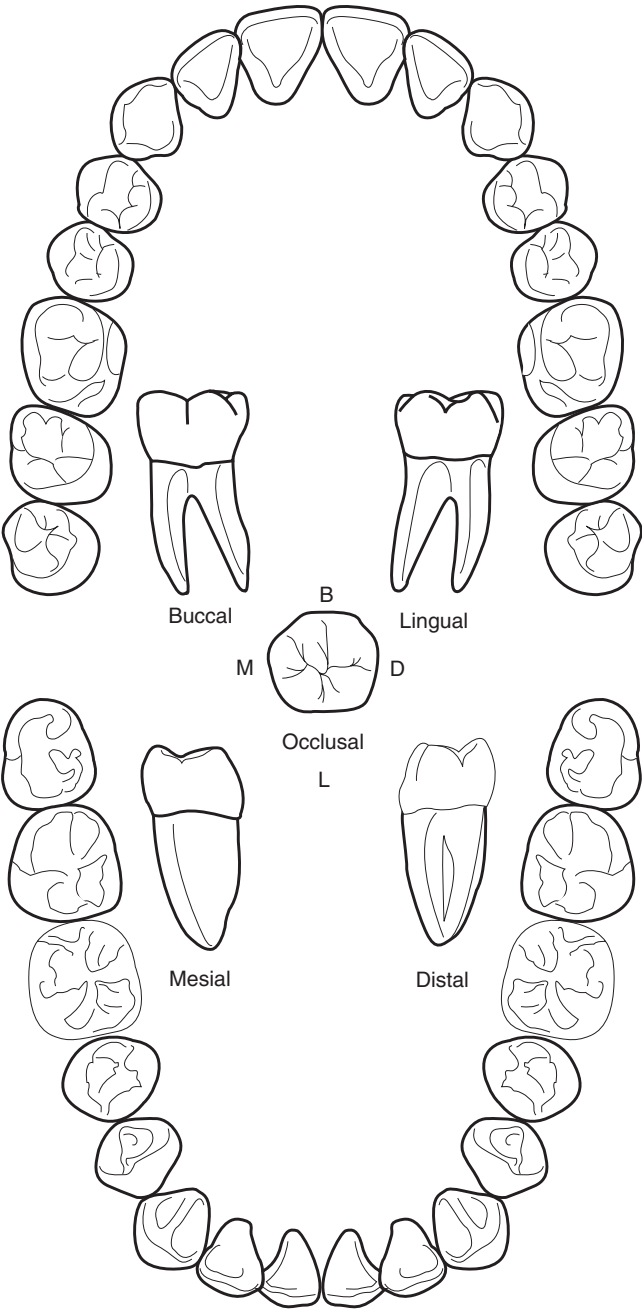
erupts 12 years of age erupts 18 years of age

tears pulverizes chews 3 cusps 4 cusps

5 cusps cusp of Carabelli no cusp of Carabelli

roots together roots spread apart distolingual is one of the largest cusps

buccal groove lingual groove

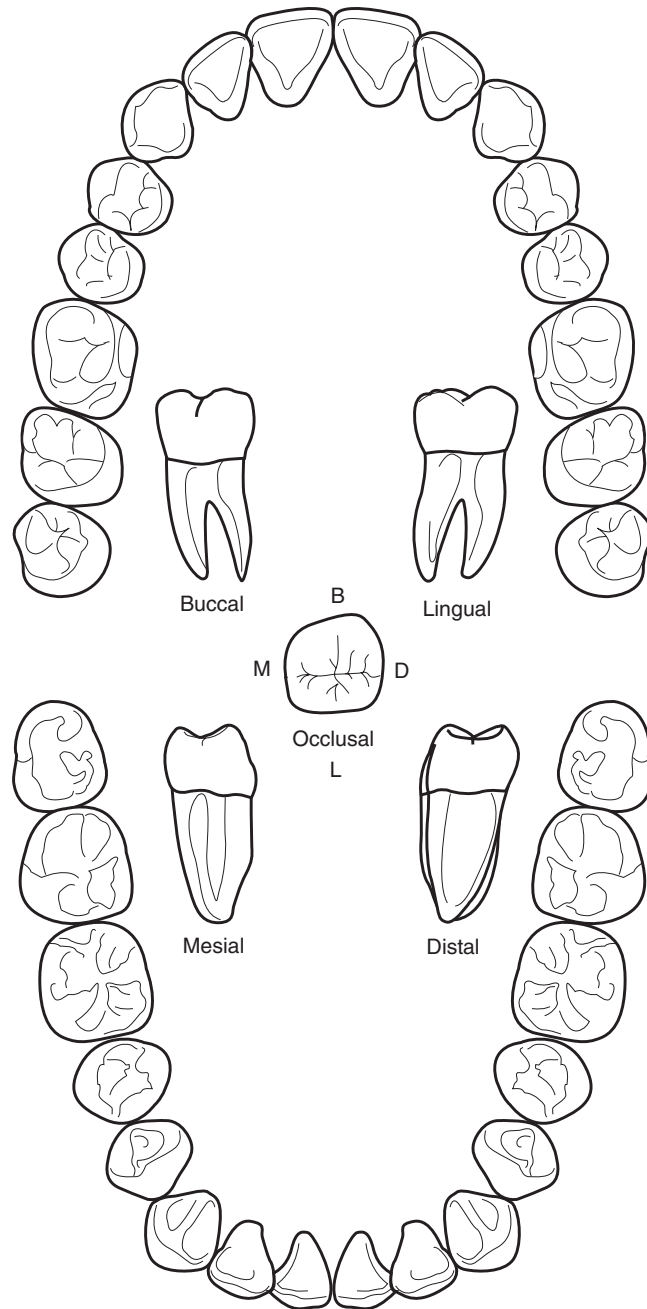


Mandibular Second Molar

Label and color the mandibular second molars.

Mix and match:

mandibular first molar	bifurcated and spread apart the most
mandibular first molar	bifurcated and roots closer together
mandibular second molar	may have many roots
mandibular second molar	6-year molar
mandibular third molar	12-year molar
mandibular third molar	wisdom tooth



Mandibular Third Molar

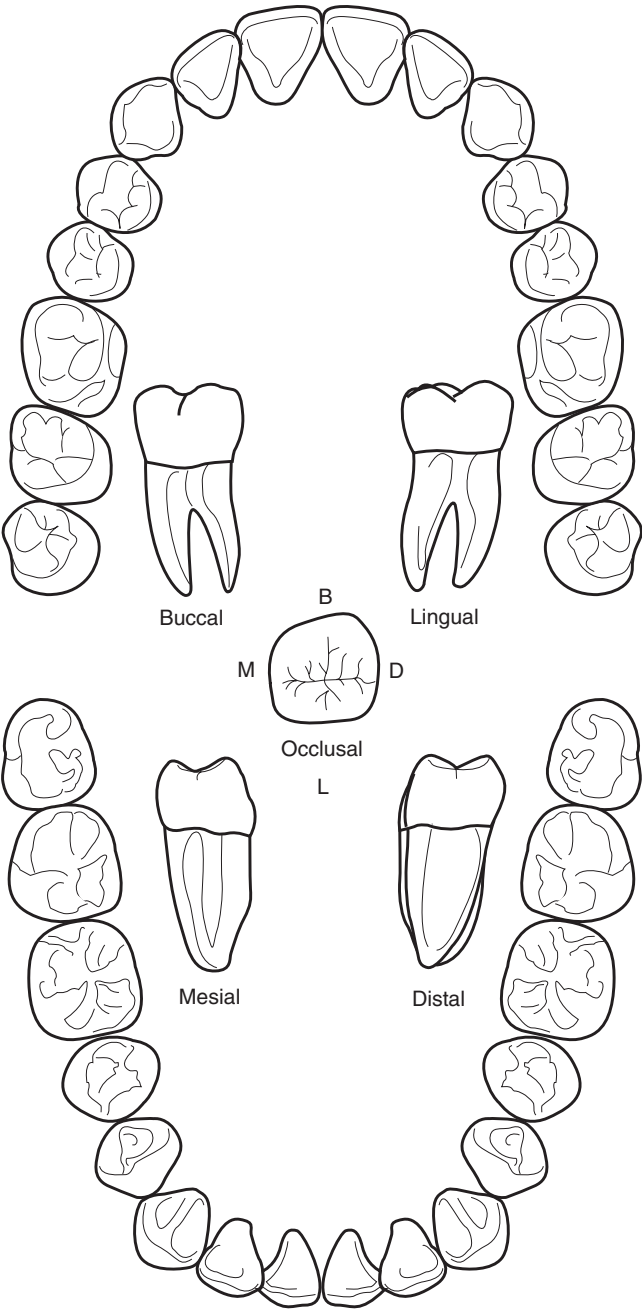
Label and color the mandibular third molars.

Fill in the blanks:

The mandibular third molars are referred to as the _____.

The mandibular third molar roots tend to angle toward the _____.

The mandibular third molar roots are often found in a _____ position.

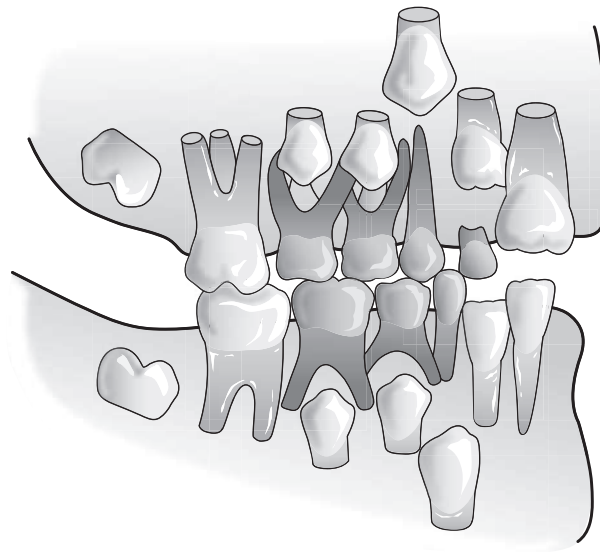


Mixed Dentition of a Seven- or Eight-Year-Old

Color the primary teeth in the line art green.

Color the succedaneous teeth in the line art red.

Color the other permanent teeth in the line art blue.



Contact and Embrasure

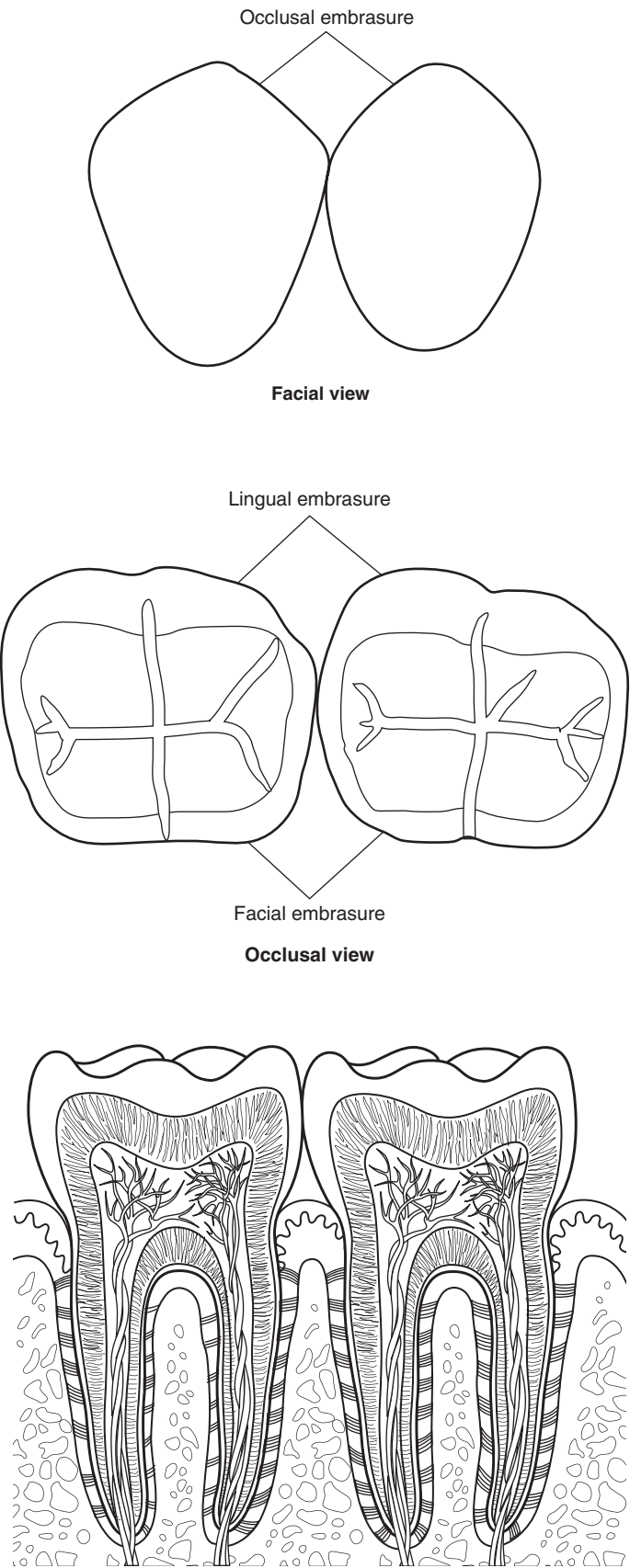
Label and color the occlusal embrasure with red.

Label and color the lingual embrasure with blue.

Label and color the facial embrasure with green.

Label and color the gingival embrasure with orange.

Make a black X on the contact point on each of the line art.



Deciduous Maxillary Teeth

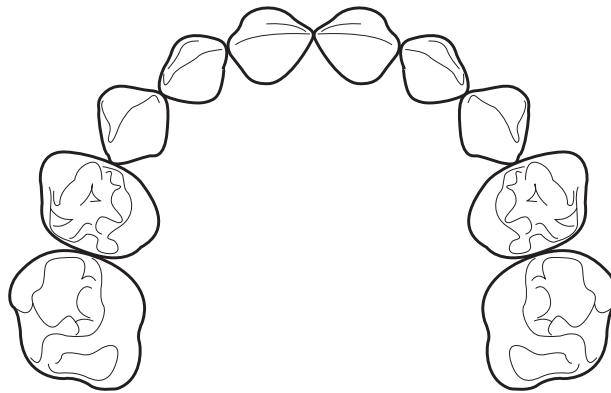
Find the deciduous maxillary cuspid, draw a red circle around it, and color it red.

Find the deciduous maxillary central incisor, draw a green box around it, and color it green.

Find the deciduous first maxillary molar, draw a yellow triangle around it, and color it yellow.

Find the deciduous second maxillary molar, draw an orange star over it, and color it orange.

Find the deciduous maxillary lateral, draw a blue rectangle around it, and color it blue.

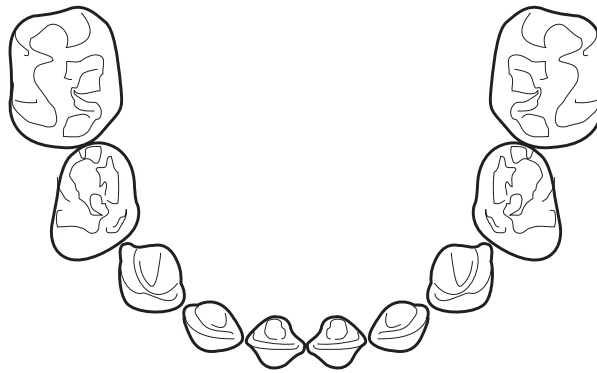


Deciduous Mandibular Teeth

Label and color each of the mandibular deciduous teeth.

Mix and match:

- | | |
|---|---|
| 1. _____ mandibular deciduous central incisor | A. resembles no other permanent or deciduous tooth |
| 2. _____ mandibular deciduous lateral incisor | B. resembles the mandibular deciduous central incisor except that it is slightly longer and wider |
| 3. _____ mandibular deciduous cuspid | C. much more delicate in form than the maxillary deciduous tooth |
| 4. _____ mandibular deciduous first molar | D. closely resembles the permanent mandibular first molar but is smaller |
| 5. _____ mandibular deciduous second molar | E. closely resembles the permanent mandibular lateral incisor |



Identification of Teeth

Label each tooth shown.

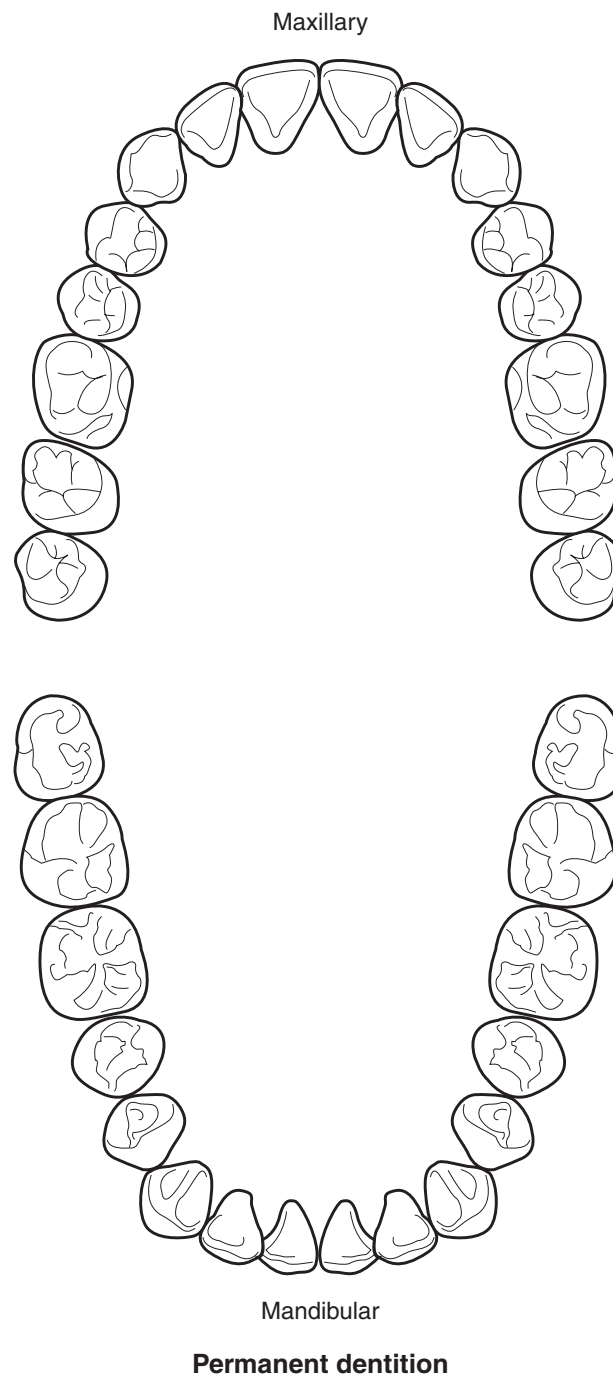
Identify the maxillary first molar and color it purple.

Identify the mandibular first molar and color it red.

Identify the maxillary cuspid and color it blue.

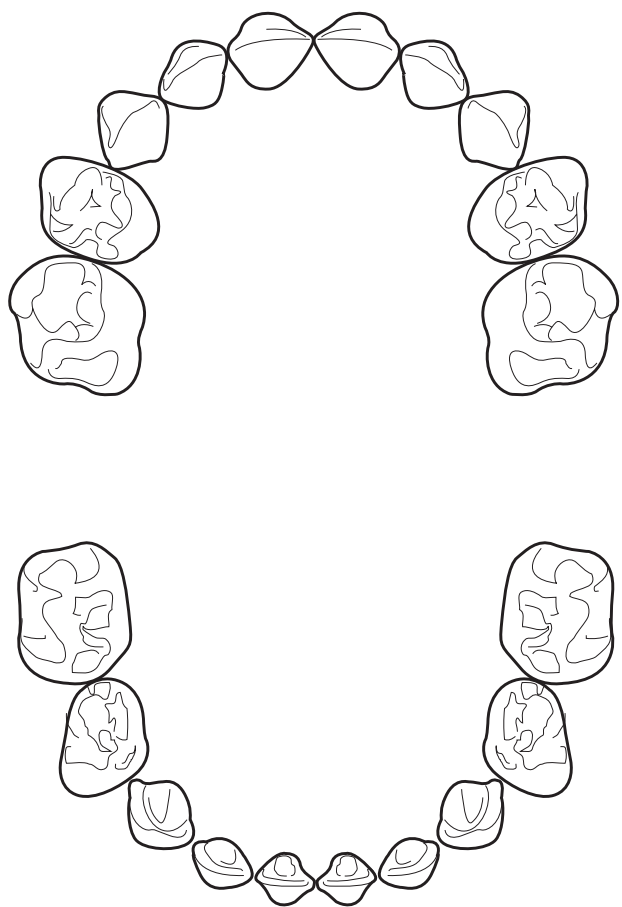
Identify the mandibular central incisor and color it purple.

Identify the maxillary first bicuspid and color it yellow.



Eruption Dates for Primary Teeth

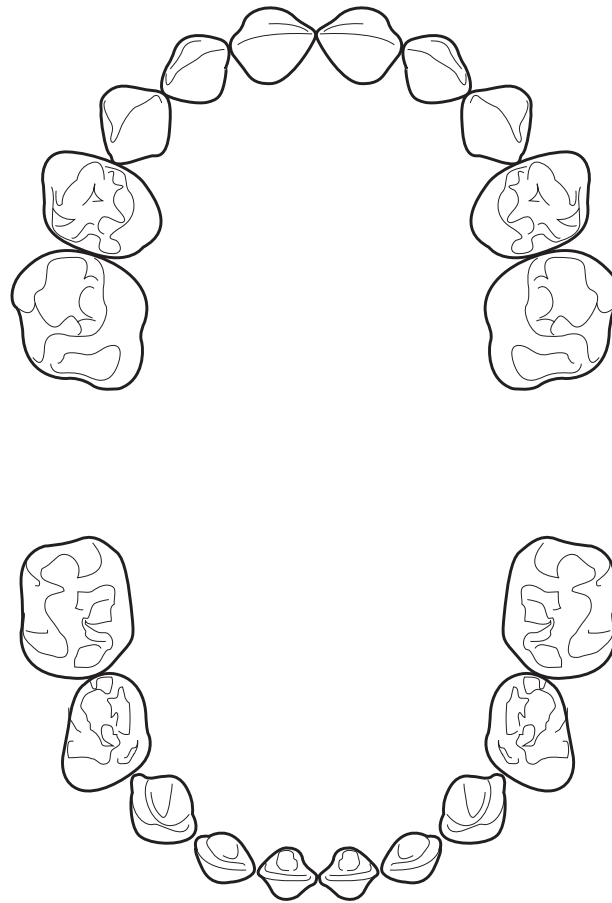
1. Define eruption of teeth.
2. Identify the teeth that erupt during 12–18 months of age and color them blue.
3. Identify the teeth that erupt during 6–10 months of age and color them yellow.
4. Identify the teeth that erupt during 24–32 months of age and color them green.
5. Identify the teeth that erupt during 9–12 months of age and color them red.
6. Identify the teeth that erupt during 16–22 months of age and color them pink.



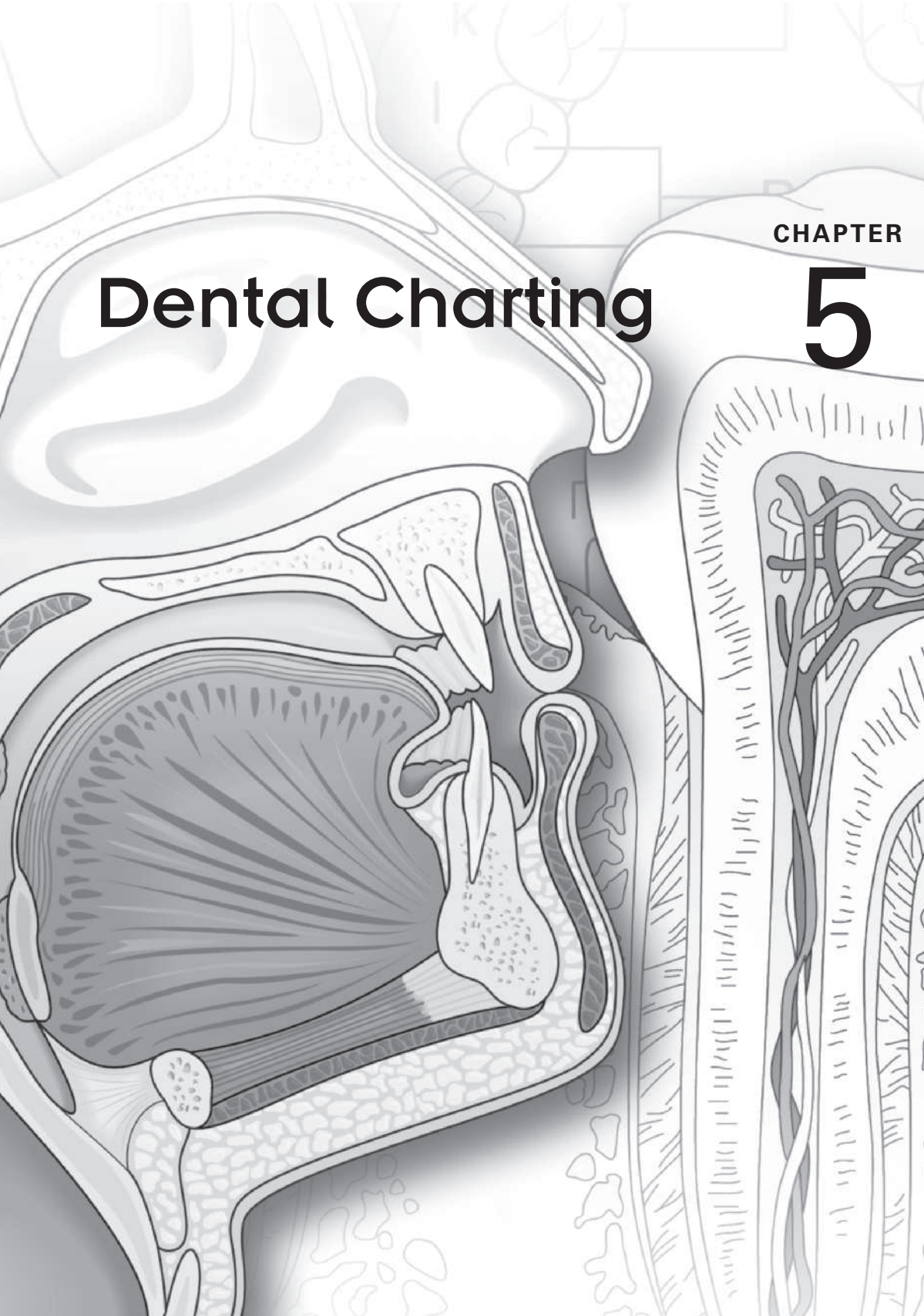
Maxillary deciduous central incisors

Exfoliation Dates for Primary Teeth

1. Define exfoliation of teeth.
2. Identify the teeth that exfoliate from 6–7 years of age and color them pink.
3. Identify the teeth that exfoliate from 10–12 years of age and color them green.
(Remember, that includes six teeth.)
4. Identify the teeth that exfoliate from 9–11 years of age and color them red.
5. Identify the teeth that exfoliate from 7–8 years of age and color them blue.



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Dental Charting

CHAPTER

5

Universal Numbering System

Number each tooth in the permanent dentition according to the universal numbering system.

Letter each tooth in the primary dentition according to the universal numbering system.

Color tooth #3 red.

Color tooth #14 blue.

Color tooth #19 green.

Color tooth #30 yellow.

Fill in the correct tooth number for the permanent teeth listed.

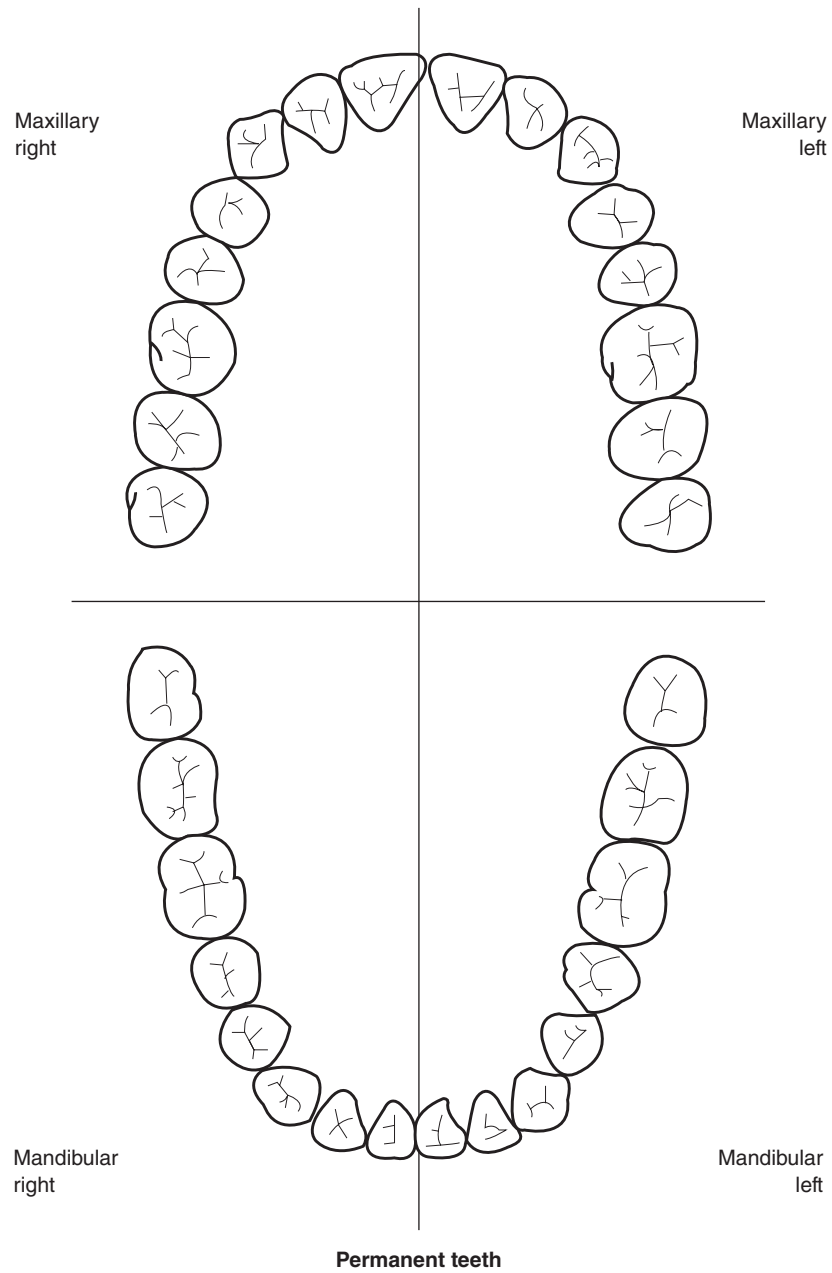
_____ maxillary right first molar

_____ mandibular left second bicuspid (premolar)

_____ maxillary left lateral incisor

_____ maxillary right cuspid

_____ mandibular right third molar



International Standards Organization Numbering System

Number each quadrant and tooth in both the permanent dentition and the primary dentition.

Color the teeth in the maxillary right permanent quadrant yellow.

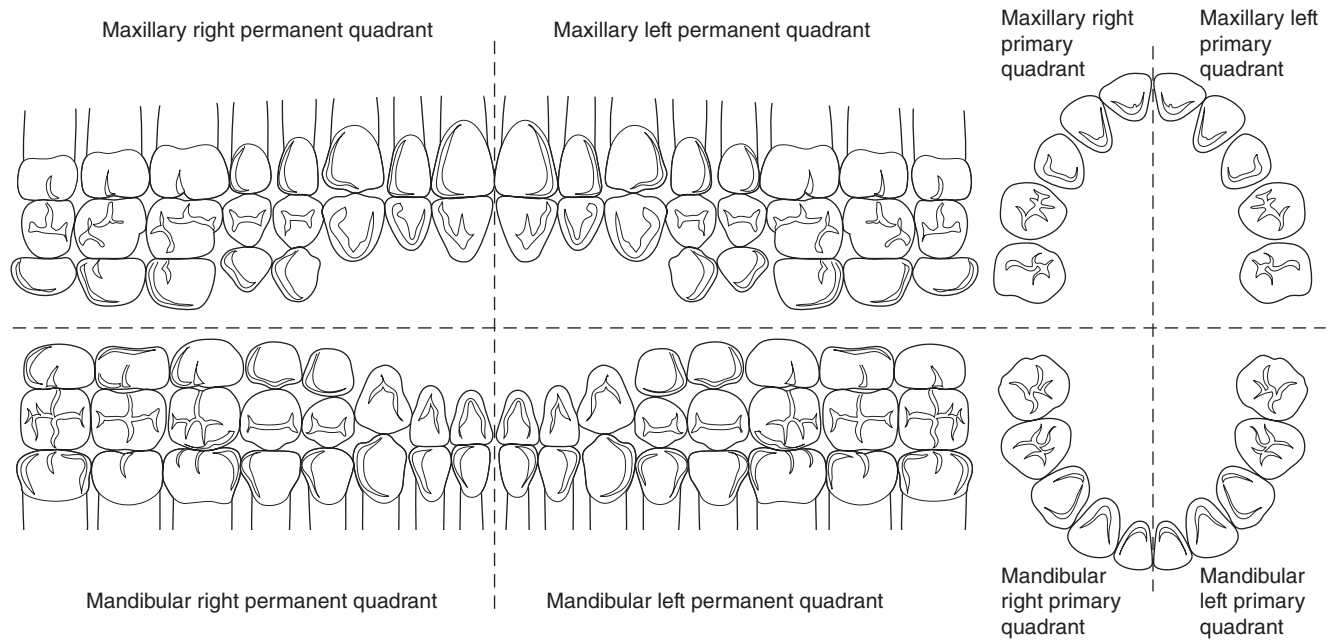
Color the teeth in the maxillary right primary quadrant red.

Color the teeth in the mandibular left permanent quadrant blue.

Color the teeth in the mandibular left primary quadrant green.

Mix and match (permanent teeth):

- | | |
|--|--------------|
| _____ maxillary right third molar | A. tooth #25 |
| _____ mandibular left central incisor | B. tooth #31 |
| _____ mandibular right central incisor | C. tooth #18 |
| _____ maxillary left second bicuspid
(premolar) | D. tooth #41 |



Palmer Numbering System

Label and color each tooth in the permanent and primary dentition the same in each quadrant of the Palmer numbering system. Example: color all lateral incisors green.

Place the correct symbol next to the permanent tooth listed:

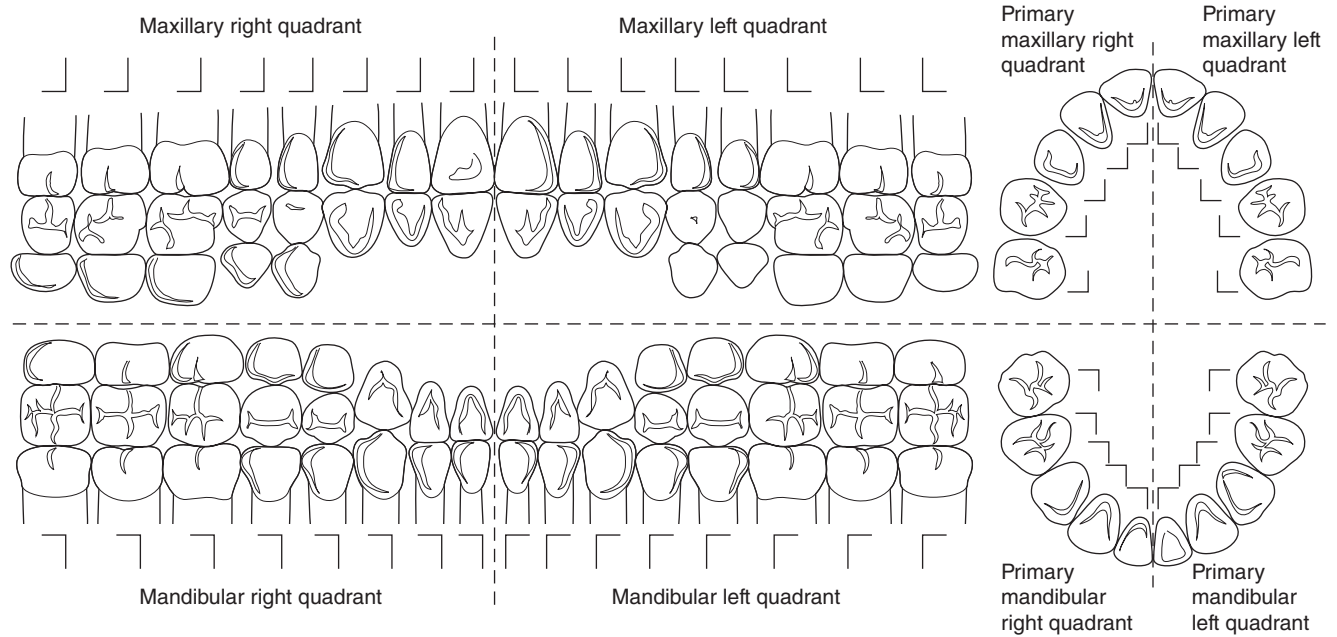
_____ maxillary right cuspid

_____ mandibular right first molar

_____ maxillary left lateral incisor

_____ maxillary left second molar

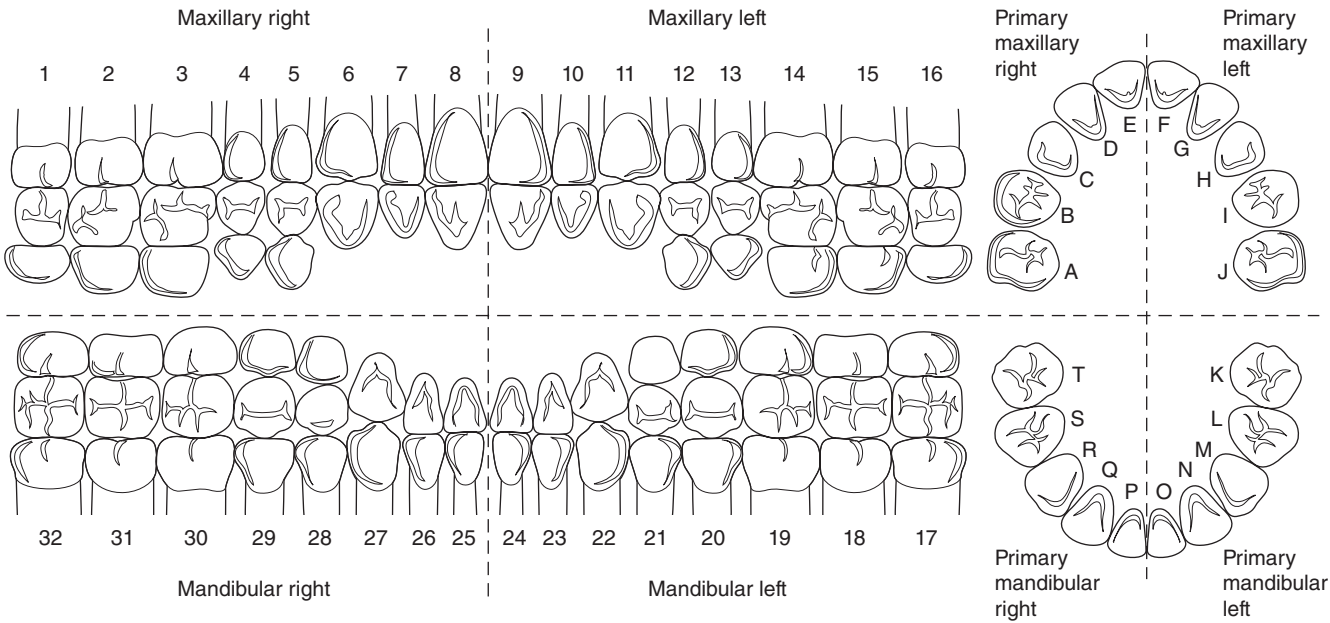
_____ mandibular left first bicuspid (premolar)



Charting Example #1

Use the charting color indication and symbols on the Universal numbering system for the following:

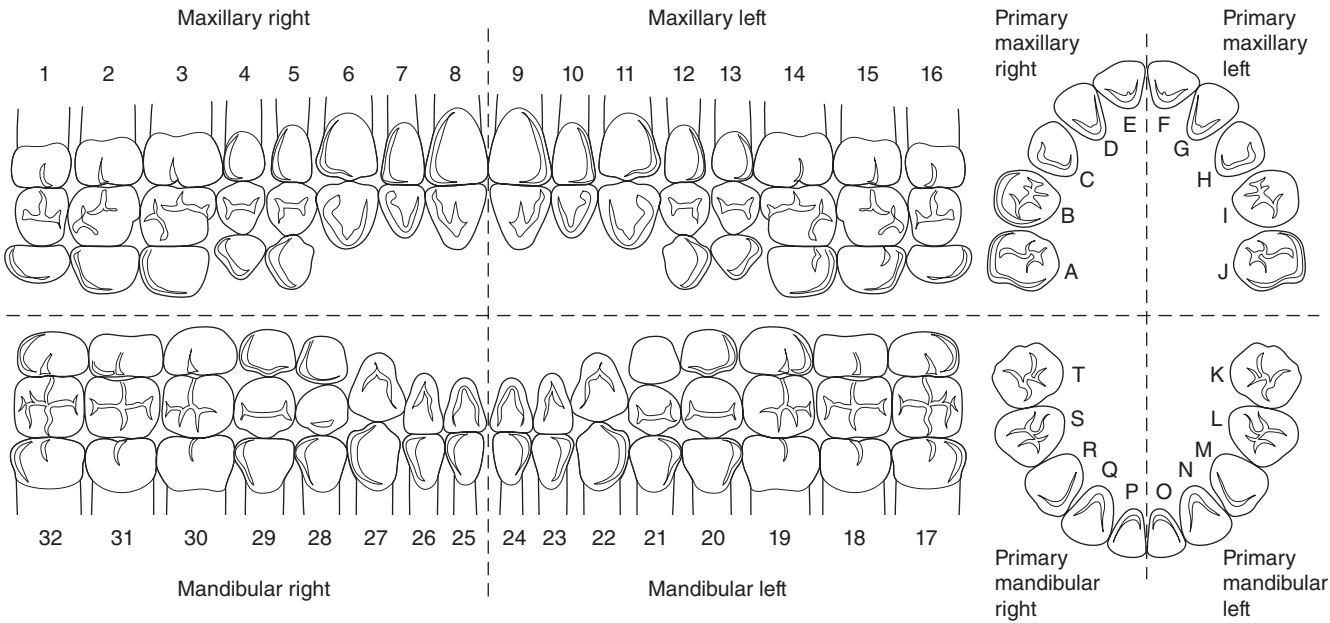
1. Tooth #3 has a Class II MOD amalgam restoration present.
2. Tooth #6 has a Class III Mesial composite restoration in place with recurrent decay.
3. Tooth #8 has had a root canal treatment, apicoectomy, and a silver retrofilling.
4. Tooth #13 has an abscess and needs a root canal.
5. Tooth #16 is overerupted.
6. Tooth #17 has been removed.
7. Tooth #18 has an MOD onlay crown.
8. Tooth #19 has an occlusal temporary restoration.
9. Tooth #20 has DO decay.
10. Tooth #29 has an MO amalgam restoration in place.



Charting Example #2

Use the charting color indication and symbols on the Universal numbering system for the following:

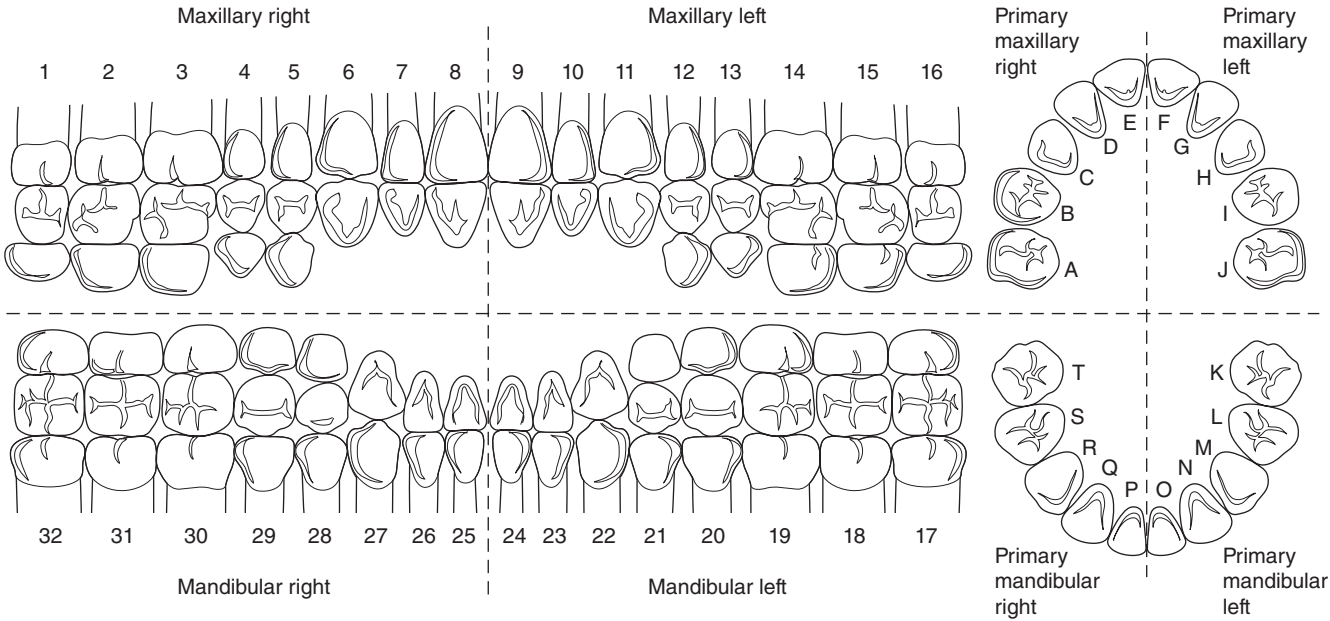
1. The maxillary right second molar has MO decay.
2. The maxillary right first molar needs a full gold crown.
3. The maxillary right cuspid has MI decay.
4. The maxillary right lateral is missing and the primary tooth is remaining in place.
5. The maxillary left first bicuspid (premolar) has been removed.
6. The mandibular left second bicuspid (premolar) has a DO amalgam restoration in place.
7. The mandibular anterior teeth have calculus in place.
8. The mandibular right cuspid has an M composite restoration in place.
9. The mandibular right first molar has buccal Class V decay.
10. The mandibular right second molar has OL decay.



Charting Example #3

Use the charting color indication and symbols on the Universal numbering system for the following:

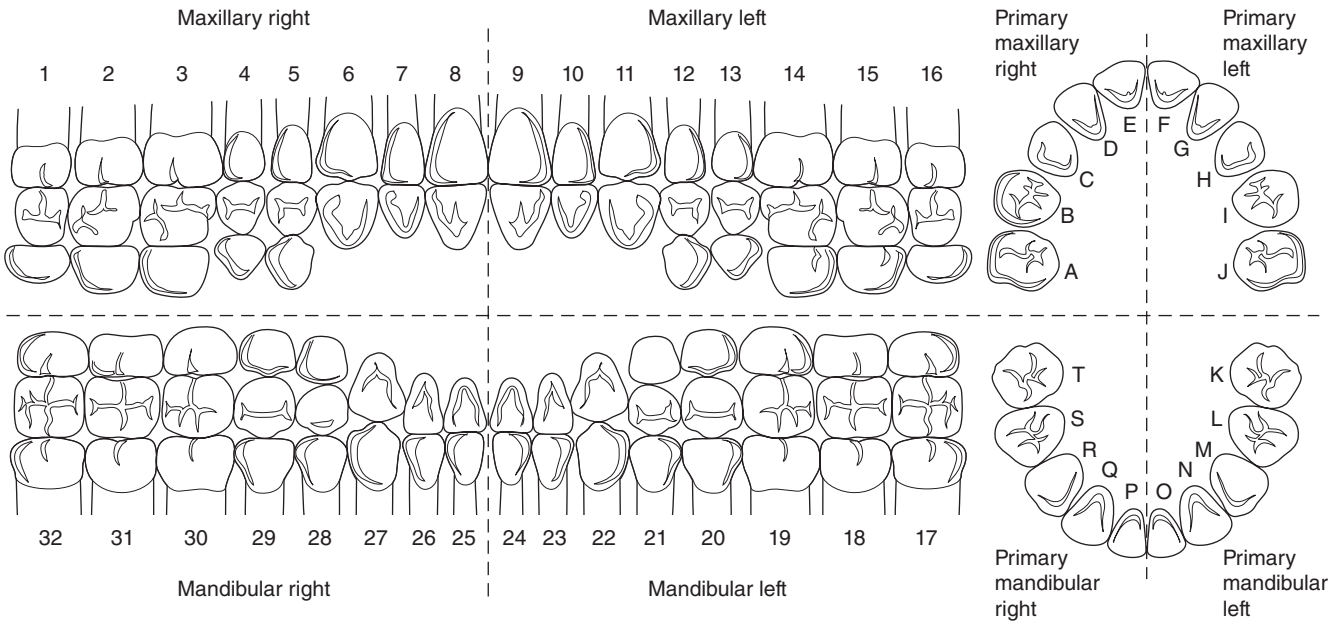
1. The maxillary right first molar has a stainless steel crown in place.
2. The maxillary right second bicuspid is rotated.
3. The maxillary right cuspid has a distal composite in place with recurrent decay.
4. The maxillary right lateral has an implant in place with a full porcelain crown.
5. There is a diastema between the maxillary right central incisor and the maxillary left central incisor.
6. The mandibular left third molar has been removed.
7. There is gingival recession on the mandibular left first molar and the mandibular left first and second bicuspid (premolars) with furcation involvement on the molar.
8. There is mobility of II on the mandibular left lateral incisor.
9. There is a MOD amalgam restoration on the mandibular right first bicuspid (premolar).
10. There is an occlusal amalgam restoration on the mandibular right first molar with recurrent decay.



Charting Example #4

Use the charting color indication and symbols on the Universal numbering system for the following:

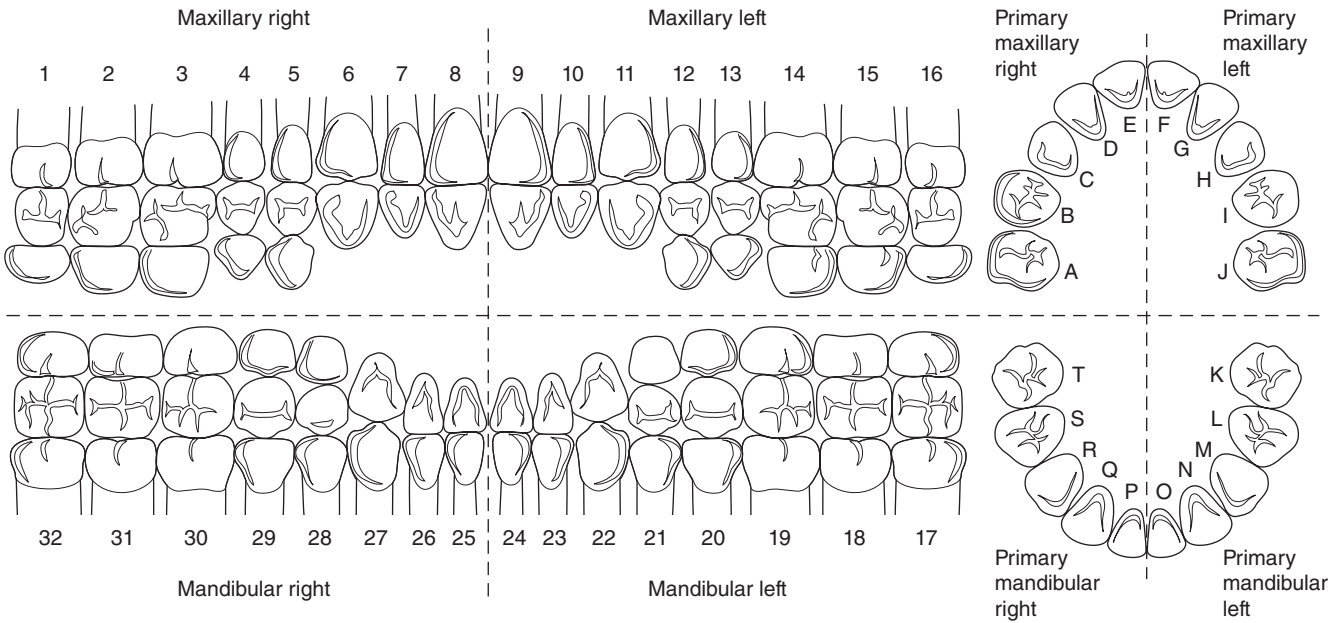
1. Tooth #1 has been removed.
2. Tooth #2 has MO decay.
3. Teeth #3–5 are a bridge and tooth #4 is missing, tooth #3 is a full gold abutment, tooth #4 is a porcelain with gold abutment, tooth #5 is a porcelain with gold abutment.
4. There is a supernumerary tooth above tooth #8.
5. Tooth #9 has a D composite.
6. Tooth #14 has a DO amalgam restoration with an overhang.
7. Tooth #16 has been removed.
8. Teeth #17, 18, 19, 30, 31, and 32 have been removed.
9. There is a partial denture replacing the mandibular teeth #18, 19, 30, and 31.
10. There is III mobility on tooth #24.



Charting Example #5

Use the charting color indication and symbols on the Universal numbering system for the following:

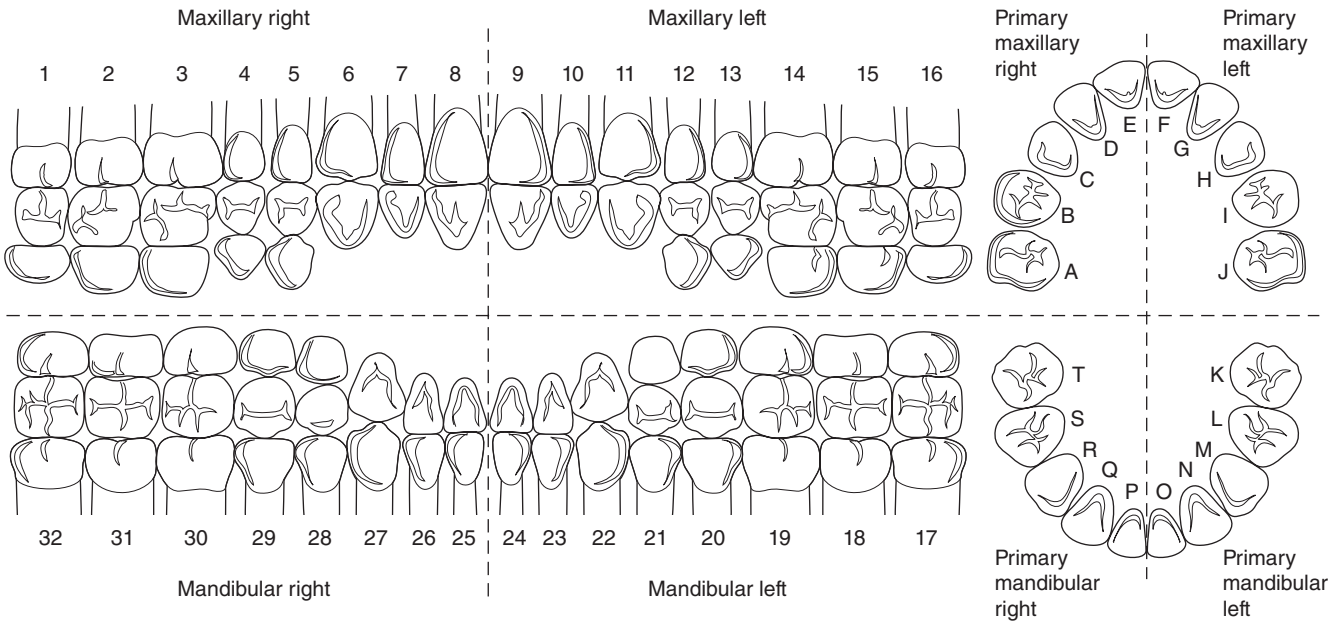
1. All the maxillary teeth have been removed.
2. There is a full denture in place on the maxillary arch.
3. The mandibular left third molar has been removed.
4. There is a full gold crown on tooth #18.
5. There is an MO amalgam restoration on tooth #19.
6. There is M decay on tooth #22.
7. There is D decay on tooth #23.
8. There is a periodontal pocket of 4 on the mesial side of tooth #24.
9. There is a periodontal pocket of 3 on the mesial side of tooth #25.
10. There is a full gold crown on tooth #30.



Charting Example #6

Use the charting color indication and symbols on the Universal numbering system for the following:

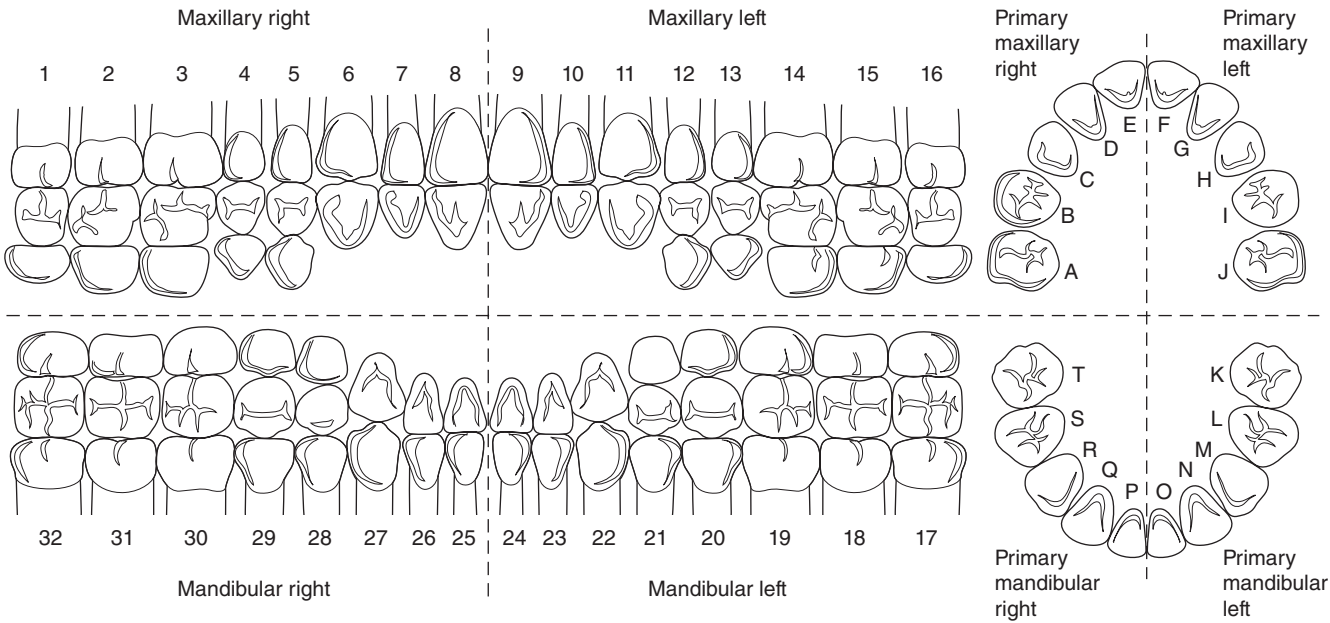
1. There is an MO amalgam on tooth #3.
2. There is a DO amalgam on tooth #4.
3. There is food impaction between teeth #3 and #4.
4. There is a lingual composite, Class 1, on tooth #7.
5. There is decalcification on the facial surface of tooth #9.
6. There is an enamel sealant on the occlusal surface of tooth #14.
7. There is an MO composite restoration on tooth #15.
8. There is an enamel sealant on the occlusal surface of tooth #18.
9. There is an enamel sealant on the occlusal surface of tooth #30.
10. All four third molars are impacted.



Charting Example #7

Use the charting color indication and symbols on the Universal numbering system for the following:

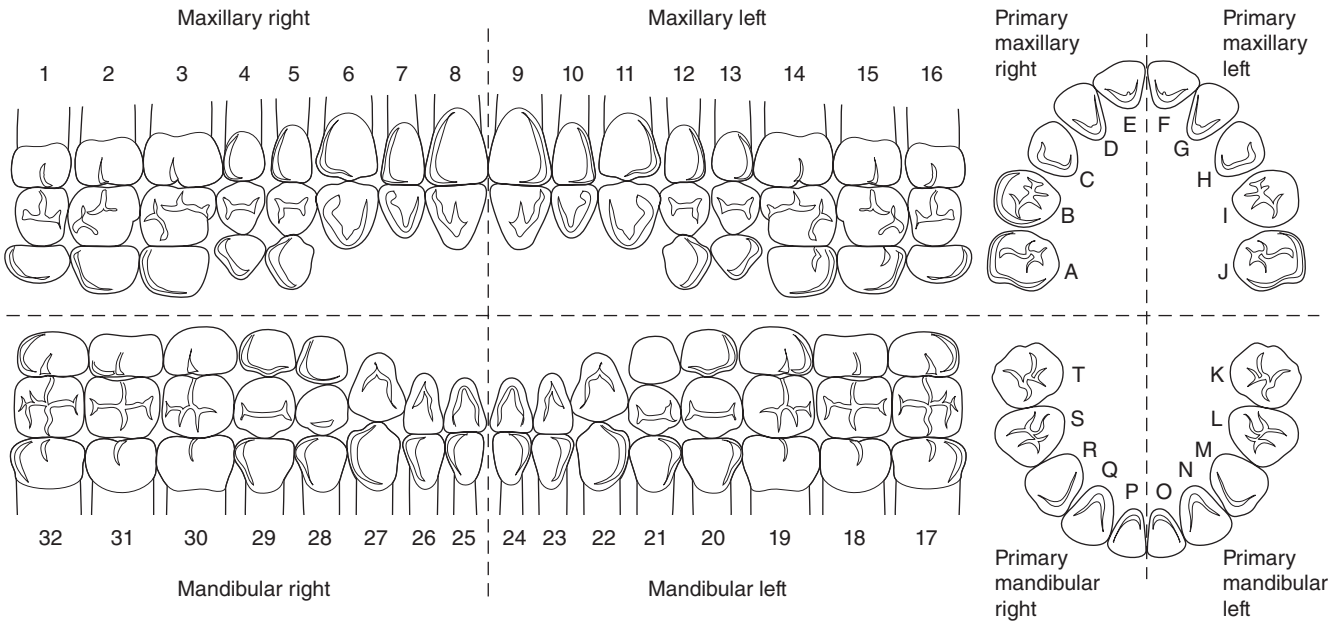
1. All the primary anterior teeth are missing.
2. The third molars are impacted.
3. The permanent maxillary right second molar has occlusal decay.
4. The permanent bicuspid (premolars) are impacted.
5. Tooth #A has a DO amalgam restoration present.
6. Tooth #B has an MO amalgam restoration present.
7. Tooth #I has an enamel sealant on the occlusal surface.
8. Tooth #J has an occlusal amalgam present.
9. Tooth #K has an enamel sealant on the occlusal surface.
10. Tooth #T has an enamel sealant on the occlusal surface.



Charting Example #8

Use the charting color indication and symbols on the Universal numbering system for the following:

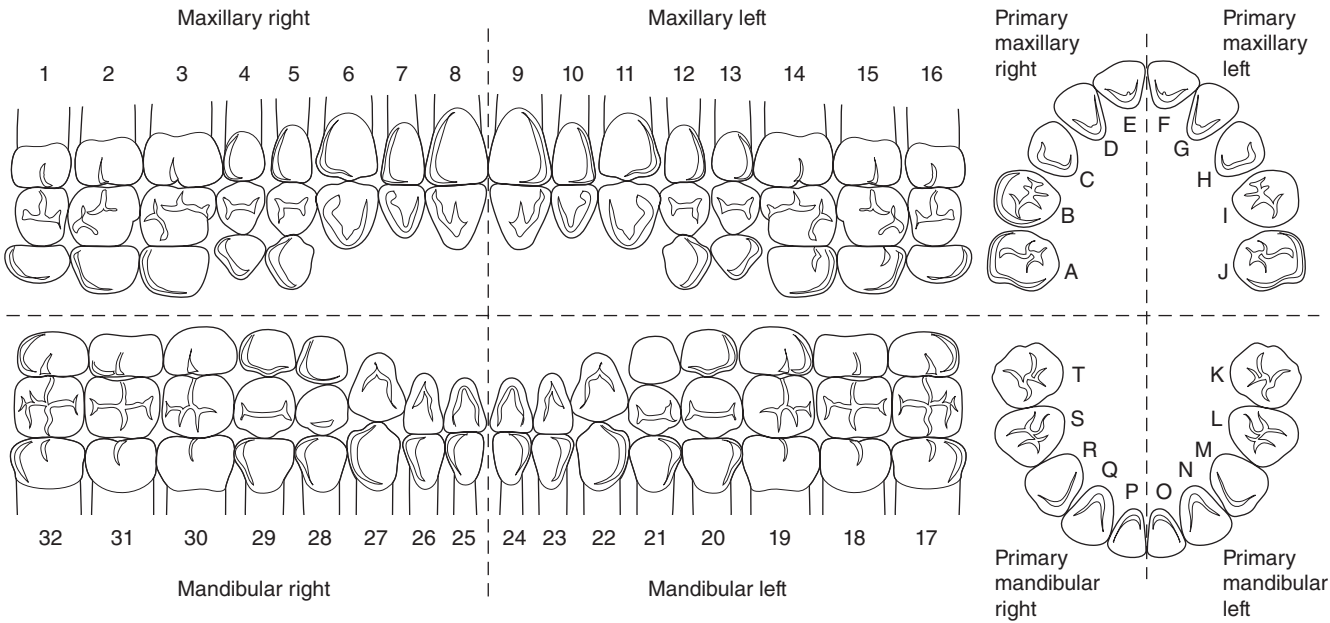
1. Tooth #3 has an abscess and needs root canal therapy.
2. Tooth #4 has an MO composite restoration in place.
3. Tooth #7 has a lingual decay.
4. Tooth #8 has a porcelain veneer.
5. Tooth #9 has a porcelain veneer.
6. Tooth #14 has a porcelain with gold crown.
7. Tooth #19 has an MOD amalgam restoration with recurrent decay.
8. Tooth #24 has an MI fracture.
9. Tooth #30 has a porcelain with gold crown.
10. Tooth #31 needs a porcelain with gold crown.



Charting Example #9

Use the charting color indication and symbols on the Universal numbering system for the following:

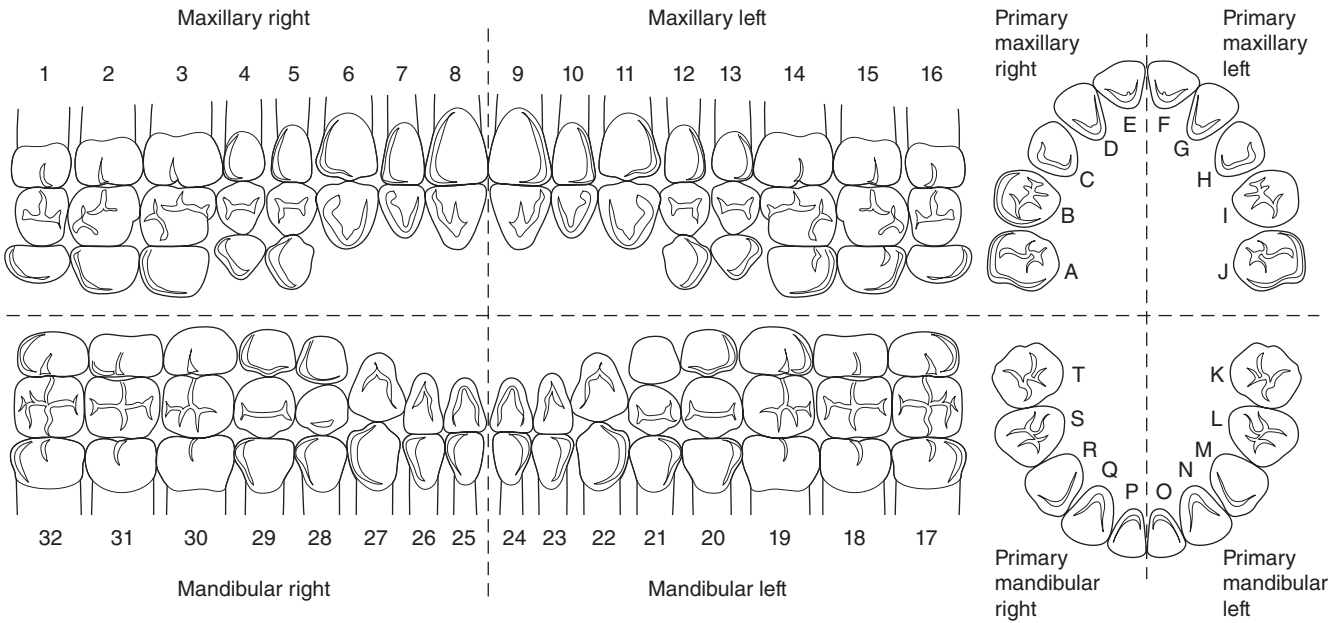
1. Tooth #1 is impacted.
2. Tooth #2 has an MO decay.
3. Tooth #4 has a DO composite restoration.
4. Tooth #7 has a full porcelain crown.
5. Tooth #8 has a DI fracture.
6. Tooth #14 has MODBL decay.
7. Tooth #18 has DO decay and B class V decay.
8. Tooth #21 has MOD composite restoration with recurrent decay.
9. Tooth #28 has a DO amalgam restoration.
10. Tooth #30 needs a full gold crown.



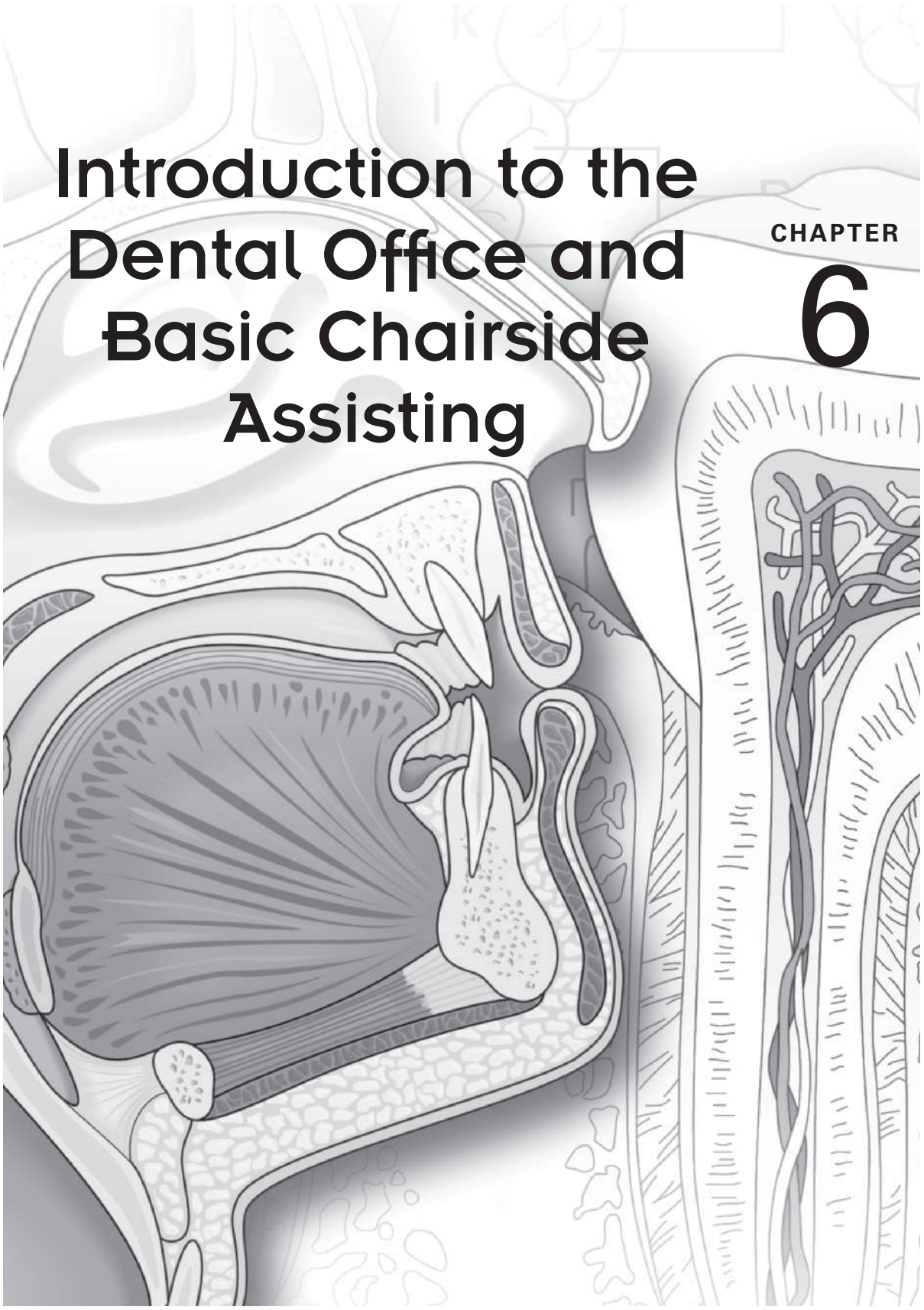
Charting Example #10

Use the charting color indication and symbols on the Universal numbering system for the following:

1. Tooth #1 needs to be removed.
2. Tooth #3 has MODBL composite restoration.
3. There is a bridge between teeth #7–9. Tooth #8 has been removed. The abutments and the pontic are all porcelain with metal.
4. Tooth #12 has an implant in place and a full porcelain with metal crown.
5. Tooth #16 is overerupted and needs to be removed.
6. Tooth #17 is impacted and needs to be removed.
7. Tooth #19 has a DO amalgam restoration.
8. There is heavy calculus on the mandibular anterior teeth.
9. There is a full gold crown on tooth #30.
10. There is a MO amalgam restoration present on tooth #31 that has recurrent decay.



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Introduction to the Dental Office and Basic Chairside Assisting

CHAPTER

6

Small Dental Office Blueprint

1. How many treatment rooms does this office have? _____

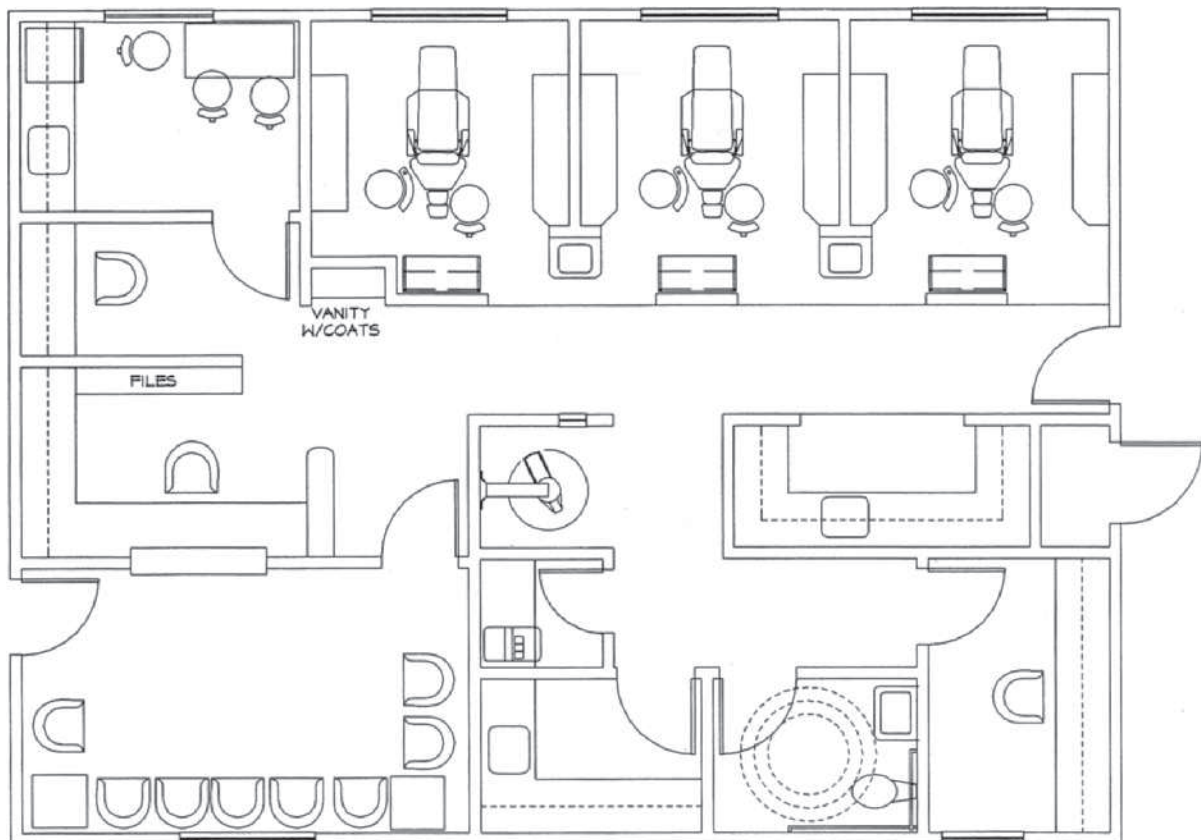
Identify and label each of the treatment rooms.

Label the following areas on the diagram: reception area, business area, sterilizing area, lab area, panoramic machine, X-ray processing room, dentist's private office, and staff area.

What small equipment items would be found in the treatment rooms?

Mix and match—identify which room/area the following equipment is found:

- | | |
|--------------------------------|--------------------------------|
| 1. _____ lab area | A. patient files |
| 2. _____ sterilizing area | B. high-speed dental handpiece |
| 3. _____ treatment room | C. safe light |
| 4. _____ X-ray processing room | D. model trimmer |
| 5. _____ business area | E. ultrasonic unit |

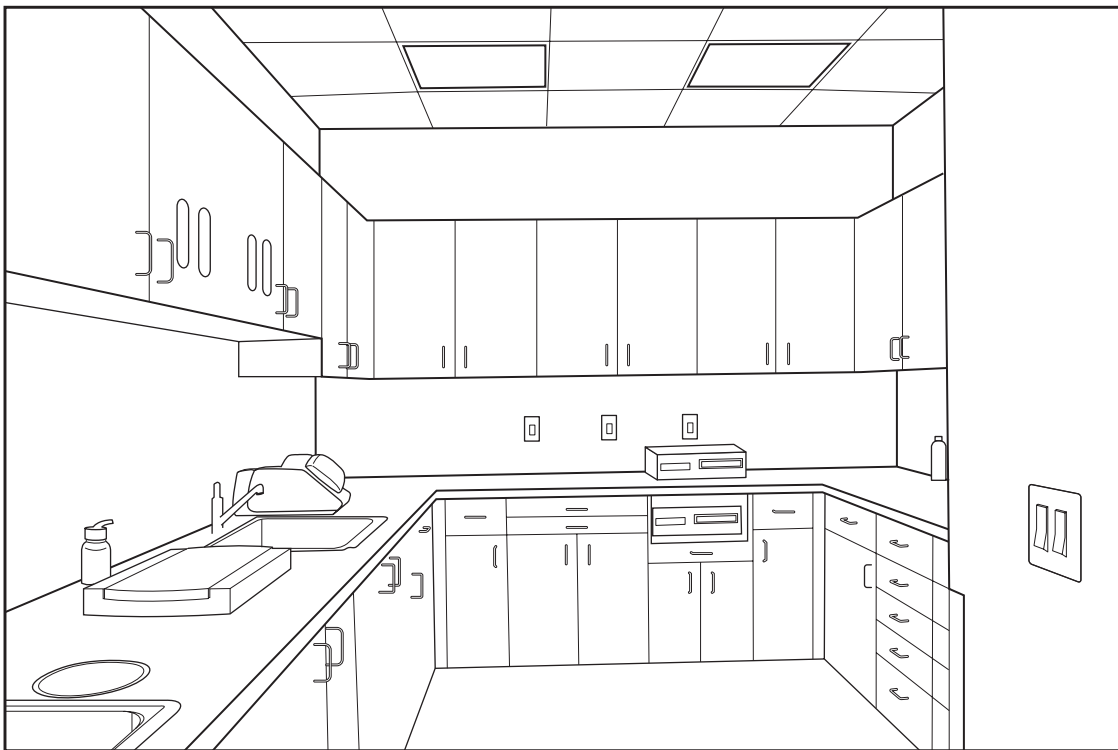


Courtesy of Burkhardt Dental Supply

Sterilizing Area

List the items found in the sterilizing area:

Label and color the following: sink, ultrasonic unit, handpiece cleaning unit, and sterilizing units.



Courtesy of Dr. Jay Enzler

Laboratory Area

Draw an arrow and label the vacuum former.

Draw an arrow and label the dental lathe.

Draw an arrow and label the model trimmer.

Draw an arrow and label the vibrator.

1. Which of the items found in the lab is used to smooth and trim dentures, custom trays, and partials?

2. What two items are used to prepare study models?

_____ and _____

3. List four other items that are not shown in this picture that would be found in the dental lab:



Courtesy of Drs. Rodney Braun and Chris Chaffin

Dental Treatment Room

Label and color the patient chair, the operator's chair, and the assistant's chair.

Label and color the dental light.

Label and color the rheostat.

Label and outline the X-ray view box.

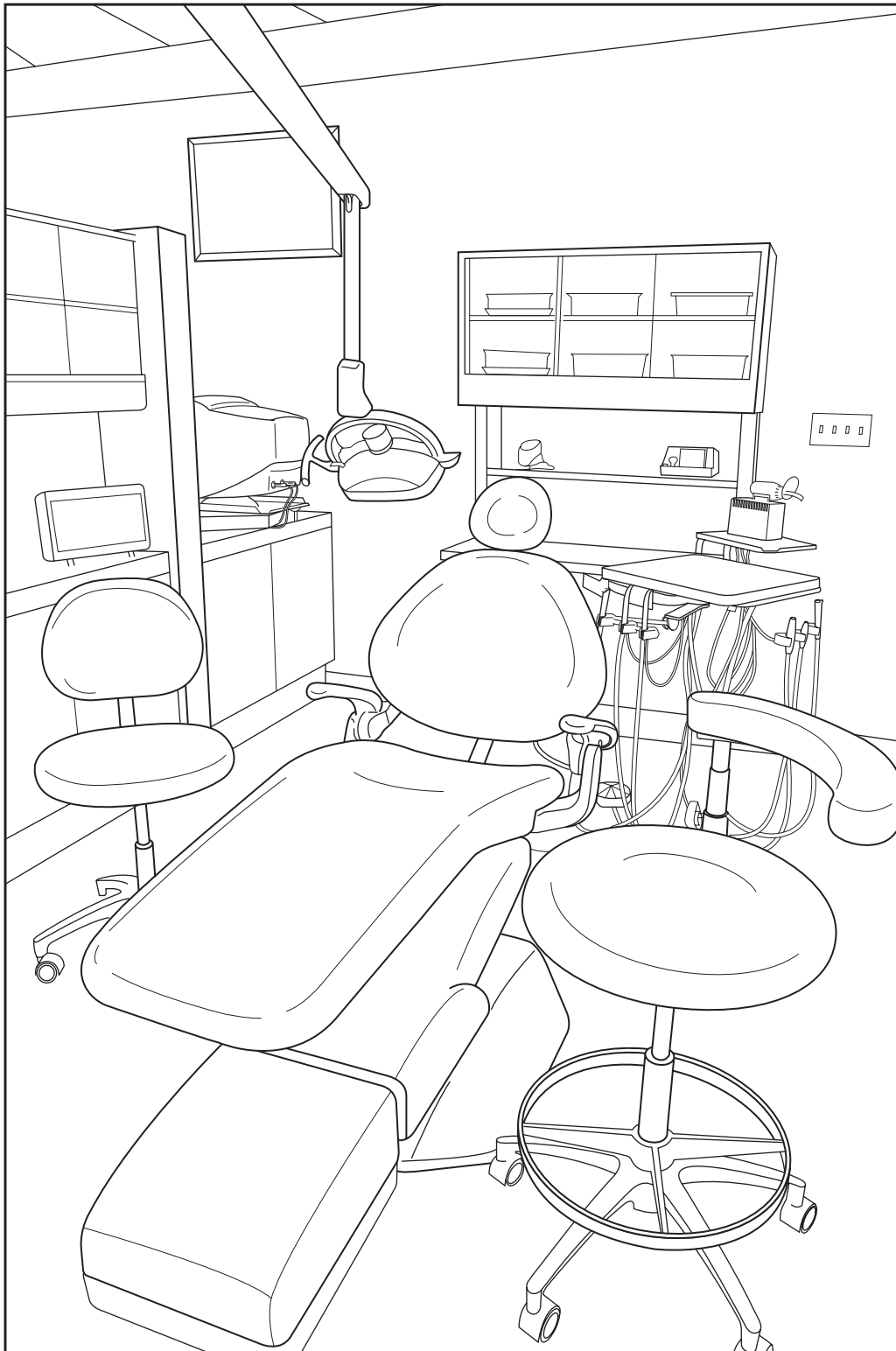
Label and color the dental amalgamator.

Label and color the dental curing light.

Label and outline the bracket that holds the high- and low-speed dental handpieces.

Label and outline the bracket that holds the HVE, the saliva ejector, and the air-water syringe.

Where are the procedure trays stored?



Operator's Mobile Cart

Label and color the handpiece connections.

Label and color the HVE.

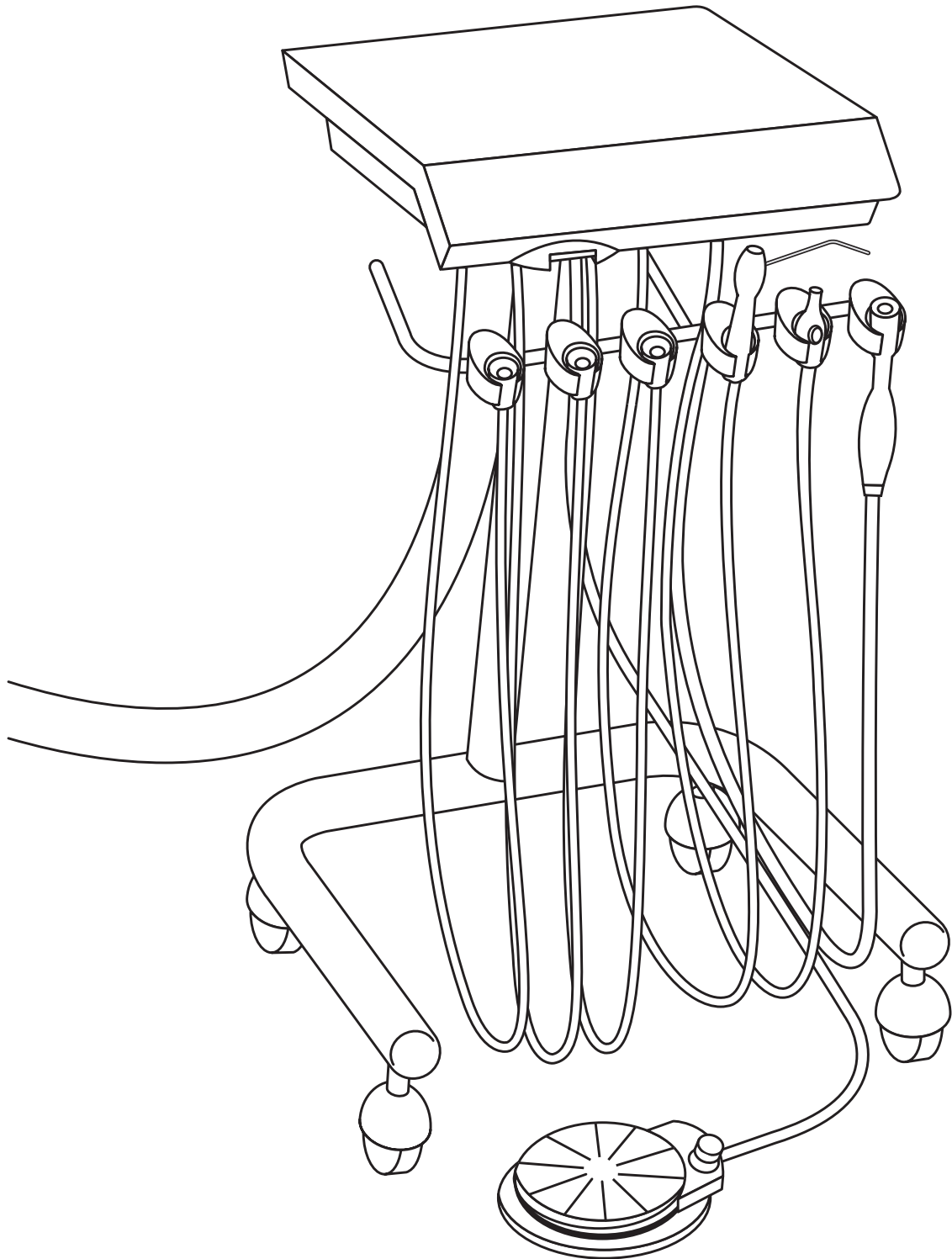
Label and color the saliva ejector.

Label and color the air-water syringe.

Label and color the rheostat.

Mix and match:

- | | |
|--------------------------|---|
| 1. _____ rheostat | A. high-volume evacuator |
| 2. _____ HVE | B. holds delivery systems for the dentist |
| 3. _____ saliva ejector | C. controls the speed of the dental handpieces |
| 4. _____ operator's cart | D. removes small volume of saliva, water, and debris from the mouth |



Air-Water Syringe

List the three functions of the air-water syringe:

1. _____
2. _____
3. _____

Label and color the following: syringe tip, handle, and controls.

1. Can the air-water syringe and tips be sterilized? _____
2. Are the syringe tips removable? _____
3. Are disposable syringe tips available? _____
4. How is the risk of retaining oral fluids in the syringe tip reduced?



Activity Zones

Label and color the transfer zone.

Label and color the static zone.

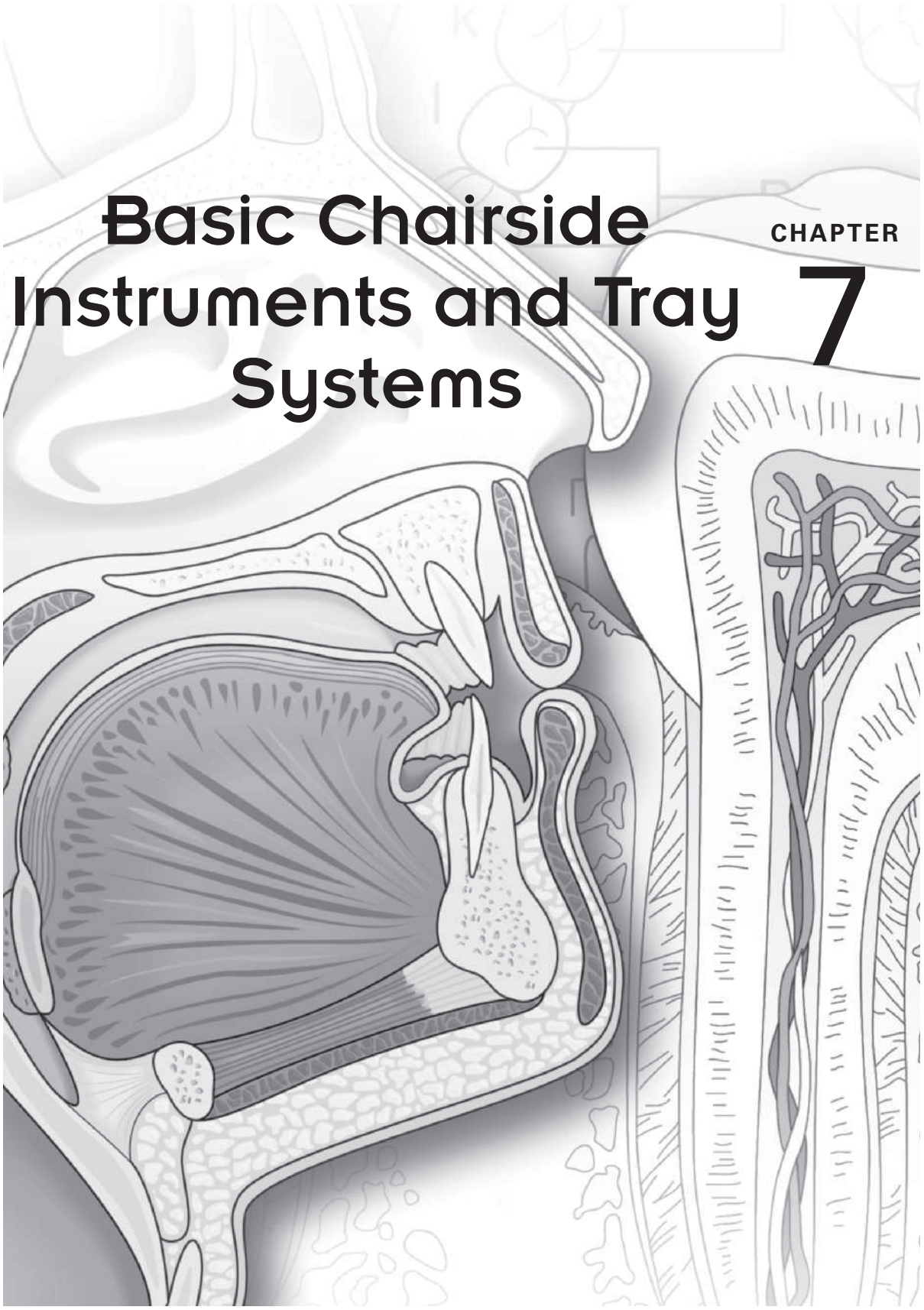
Label and color the assistants' zone.

Label and color the operators' zone.

1. Which of the following items would be found in the static zone?
 - A. dental instruments
 - B. amalgamator
 - C. curing light
 - D. all of the above
2. In which of the zones are instruments passed between the operator and the assistant?
 - A. operators' zone
 - B. assistants' zone
 - C. static zone
 - D. transfer zone
3. Is the picture on the next page showing the activity zones for:
 - A. a right-handed operator
 - B. a left-handed operator



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Basic Chairside Instruments and Tray Systems

CHAPTER

7

Parts of an Instrument and Different Shanks

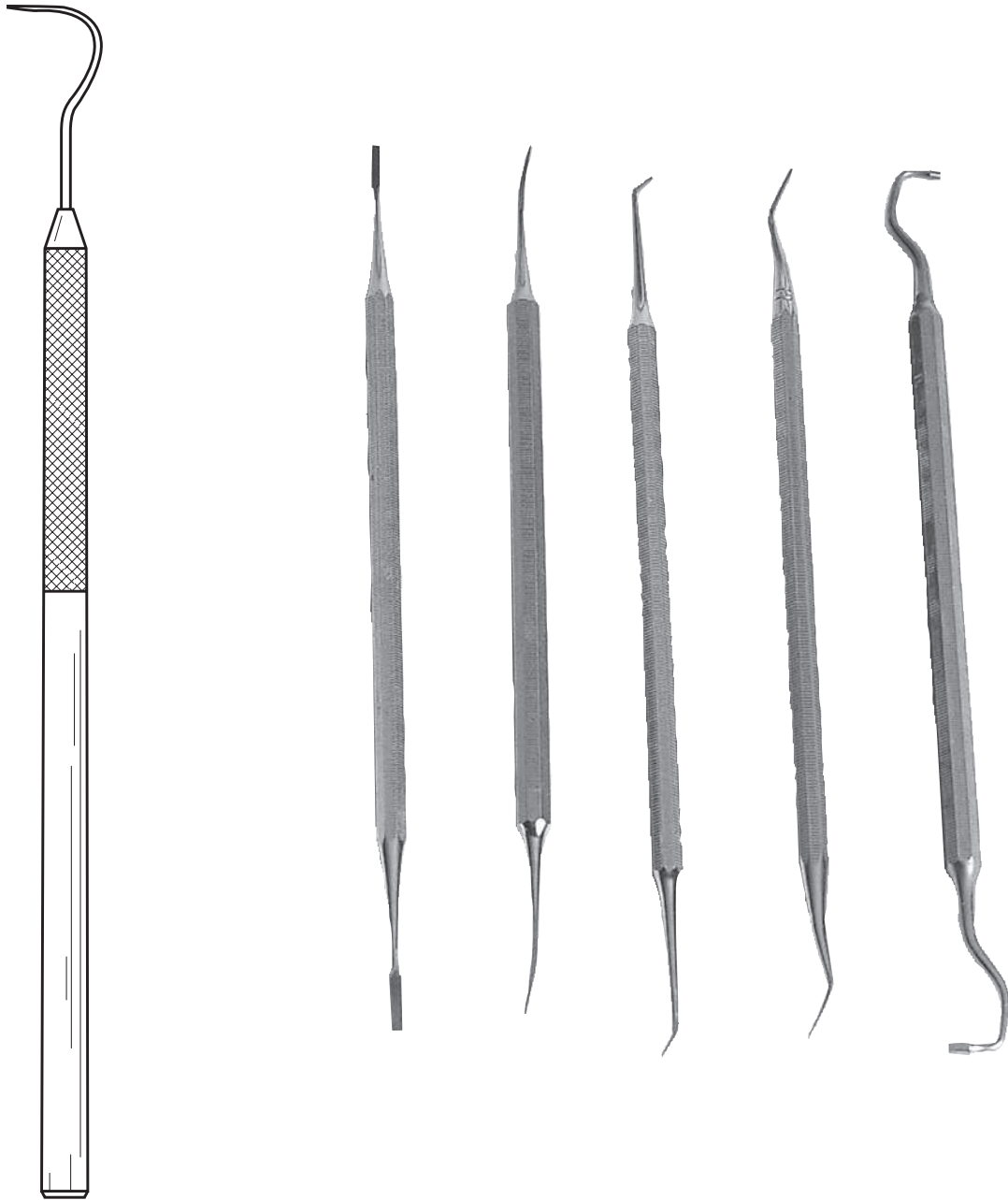
Label and color the parts of a dental instrument.

List the five different instrument shanks:

Label the shanks and, in color, outline the different shapes.

1. The instruments with more angles are used in which part of the mouth?

2. The straight or slightly curved instruments are used in which part of the mouth?



Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

Instruments with Black's Three-Number Formula

Draw a dotted line from the handle extending beyond the working end of the instrument.

The first number in the three-number formula represents the _____

_____.

Label and color this part of the instrument in red.

The second number in the three-number formula represents the _____

_____.

Label and color this part of the instrument in blue.

The third number in the three-number formula represents the _____

_____.

Label and color this part of the instrument in green.

List the instruments that have Black's three-number formula.



Instruments with Black's Four-Number Formula

Draw a dotted line from the handle extending beyond the working end of the instrument.

The first number in the four-number formula represents the _____.

Label and color this part of the instrument in red.

The second number in the four-number formula represents the _____.

Label and color this part of the instrument in pink.

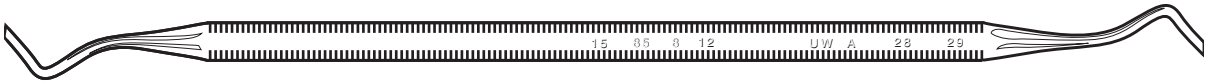
The third number in the four-number formula represents the _____.

Label and color this part of the instrument in blue.

The fourth number in the four-number formula represents the _____.

Label and color this part of the instrument green.

List the instruments that have Black's four-number formula.



Chisels, Hatchets, and Hoes

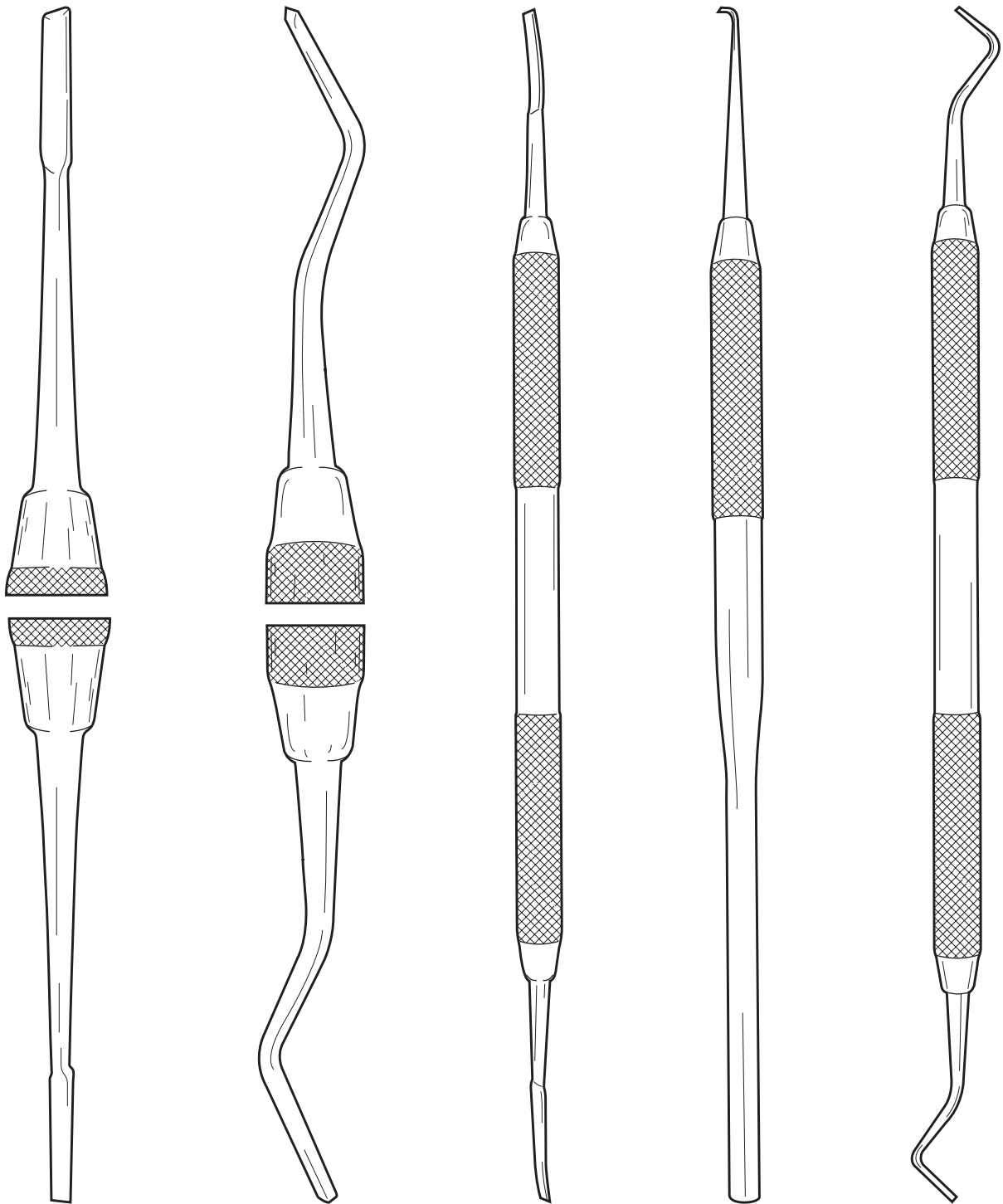
Draw a circle around the chisels.

List, label, and outline in color the three chisels.

Label and outline in color the hatchet.

Label and outline in color the hoe.

1. These instruments are called _____.
2. _____ are used in a downward motion to refine the cavity preparation.
3. The _____ chisel is used for Class III and IV cavity preparations.
4. All of these instruments have a _____ edge at the end of the blade.
 - A. beveled
 - B. bi-beveled



Courtesy of Hu-Friedy Mfg. Co., Inc.

Gingival Margin Trimmers and Angle Formers

Label and outline in color the mesial gingival margin trimmer.

Draw a line across the cutting edge.

Label and outline in color the distal gingival margin trimmer.

Draw a line down the cutting edge.

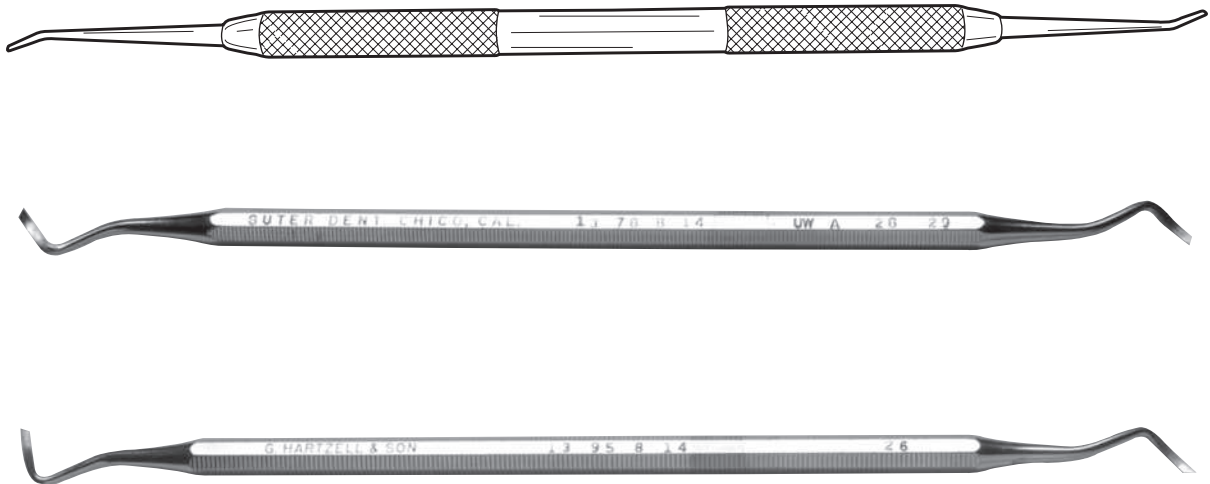
Label and outline in color the angle former.

1. These instruments have _____.

- A. a two-number formula
- B. a three-number formula
- C. a four-number formula
- D. no number formula

2. Which of the numbers in the series indicates the slanted cutting edge?

3. If this number is above 90 degrees the instrument is used on the _____.



Courtesy of Hu-Friedy Mfg. Co., Inc.

Excavators

1. Another name for excavators is _____.
2. List the two types of excavators:

Label and color the working ends of the excavators.

3. Excavators are used to:
 - A. define point angles
 - B. remove carious material and debris from the teeth
 - C. shape and plane enamel and dentin
 - D. smooth and shape the floor of the cavity preparation



Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

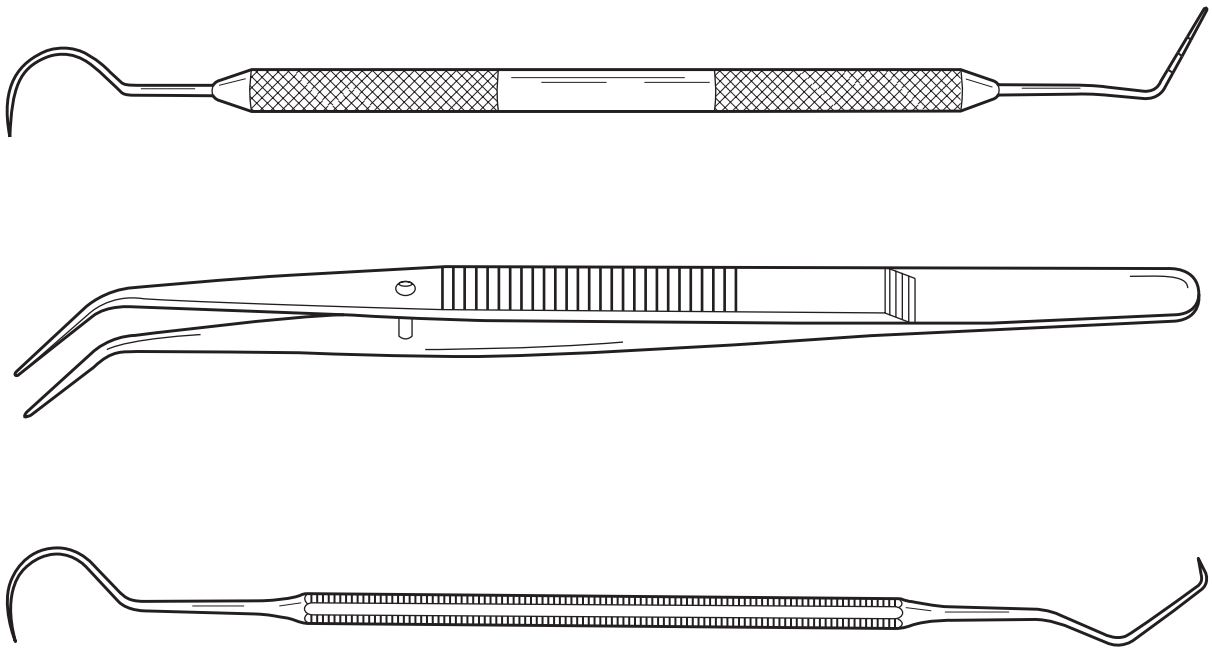
Explorers, Periodontal Probe, and Cotton Pliers

Label and color the double-ended explorer.

Label and color the cotton pliers.

Label and color the instrument that has an explorer on one end and a periodontal probe on the other end.

1. These cotton pliers are _____ pliers.
2. What is the instrument called that has an explorer on one end and a periodontal probe on the other end? _____



Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

Cement Spatulas and Burnishers

Label and color the cement spatulas.

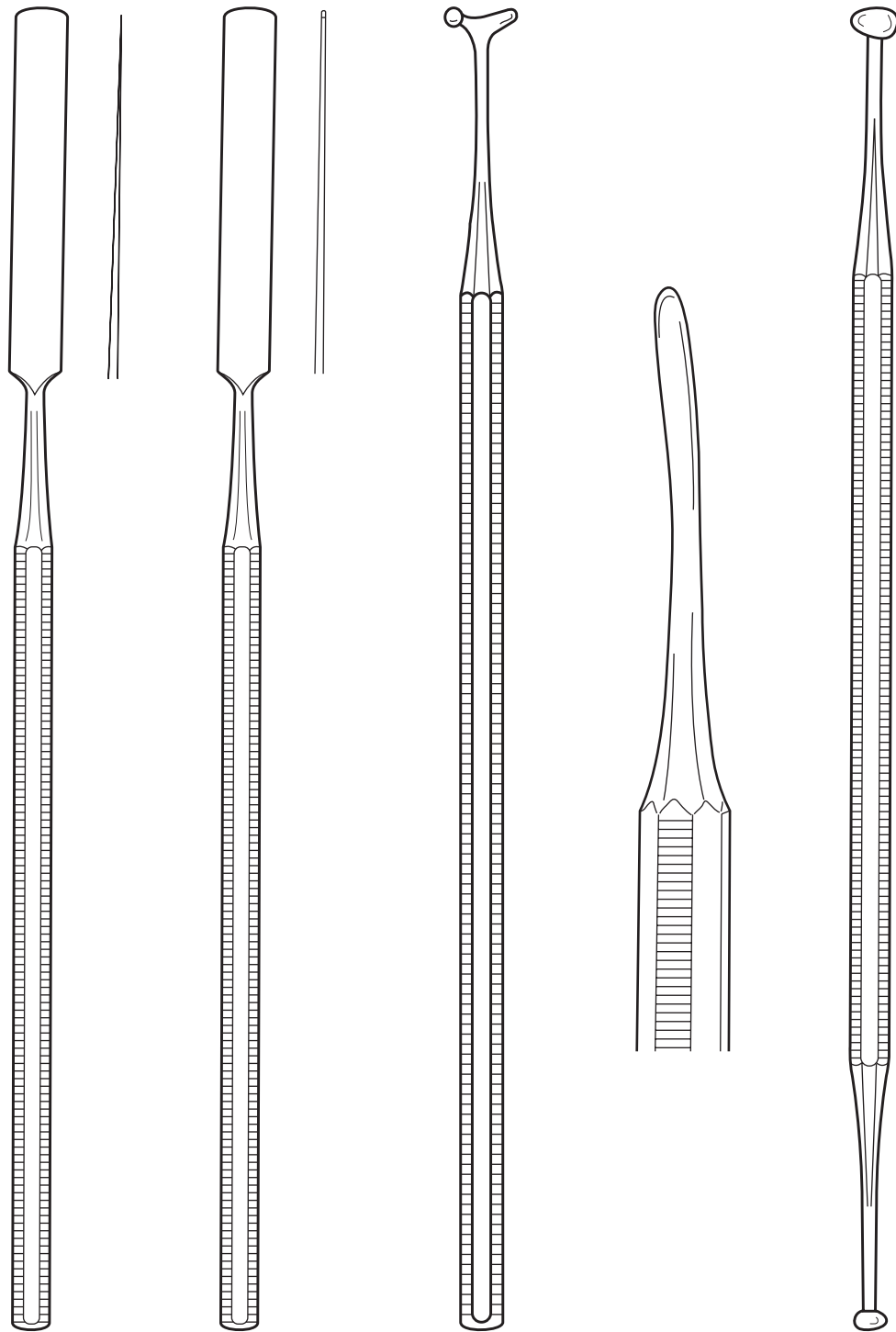
Label and color the T-ball burnisher.

Label and color the beaver-tail burnisher.

Label and color the football burnisher.

Burnishers are used to:

- A. mix cement
- B. smooth rough margins on restorations
- C. shape metal matrix bands
- D. B and C



Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

Condensors, Carvers, and Plastic Filling Instruments

Mix and match:

- | | |
|-------------------------------------|---|
| 1. _____ Hollenback carver | A. working ends may be smooth or serrated |
| 2. _____ amalgam condensor | B. are made of either metal or plastic materials |
| 3. _____ plastic filling instrument | C. one end looks like a claw and the other a disc |
| 4. _____ cleoid/discoid carver | D. long bladed instrument |

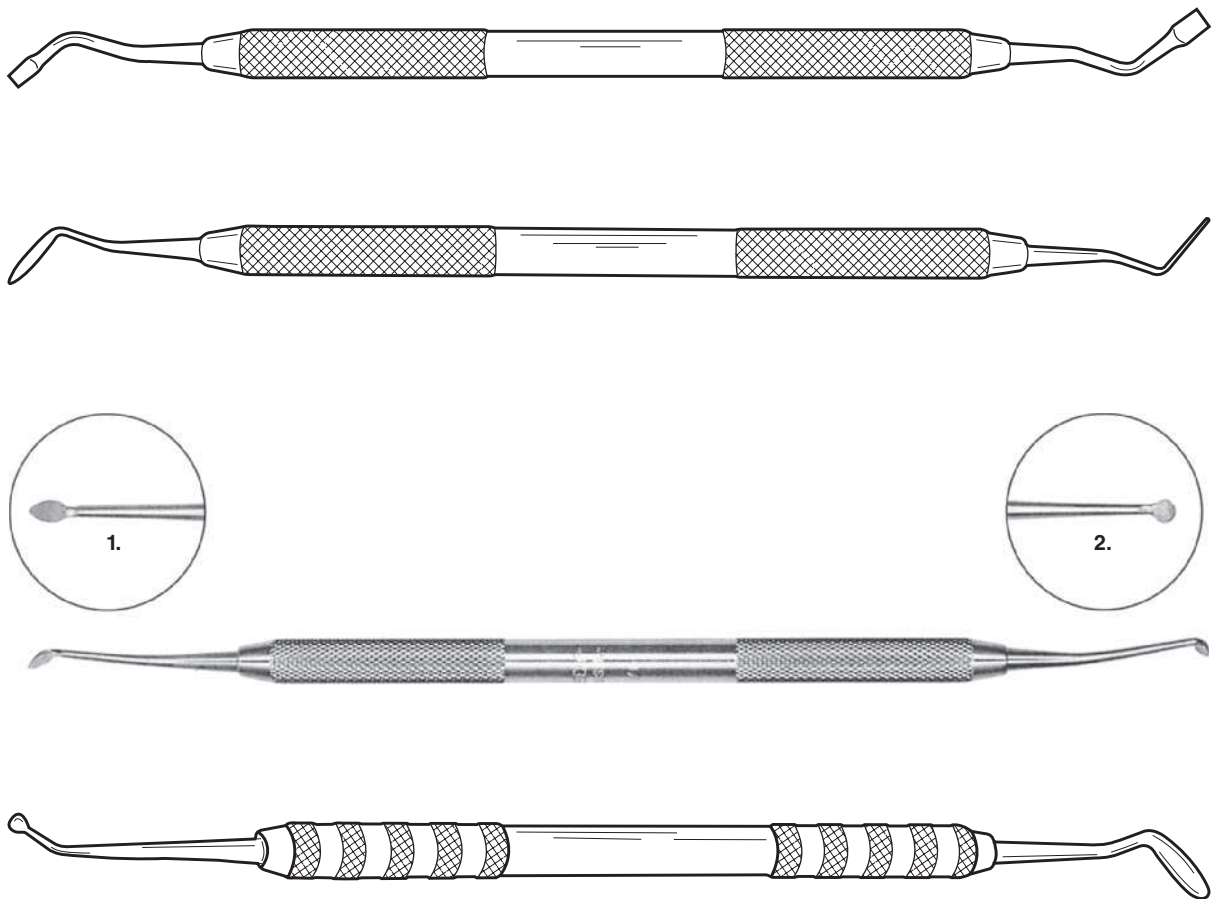
Label the carvers.

Color the Hollenback carver.

Color the cleoid end of this instrument red and the discoid end blue.

Label the plastic filling instrument and then color the different working ends different colors.

Label and color the amalgam condensor.



Courtesy of Hu-Friedy Mfg. Co., Inc.

Parts of a Bur and Shanks

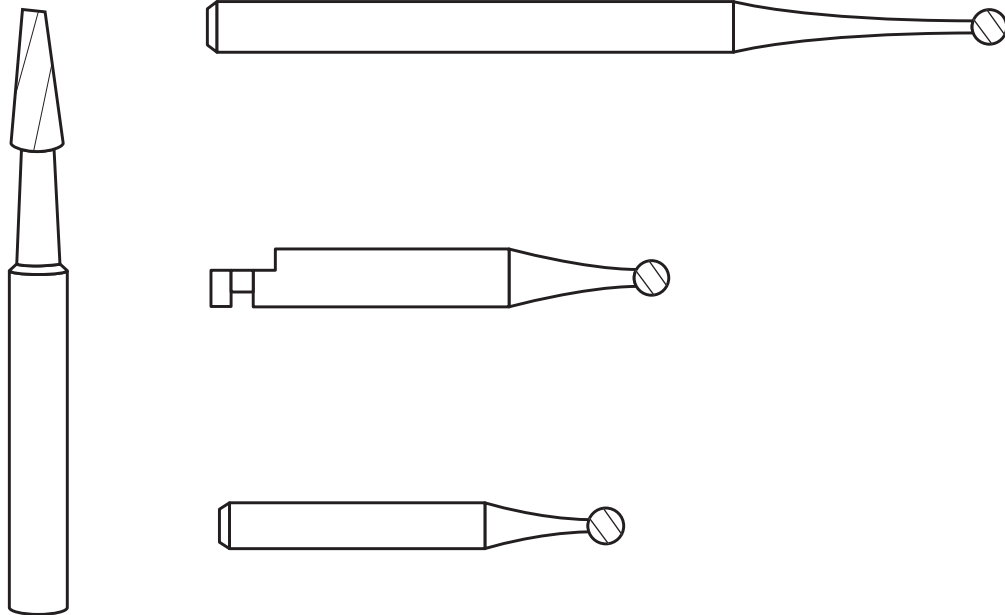
Label and color the parts of a bur.

List the three types of shanks on burs:

Label and color code the different shanks.

Which of the shanks is used with a high-speed handpiece?

Which of the shanks is used with a slow-speed handpiece without an attachment?



Cutting Bur Shapes and Number Ranges

List the cutting burs:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Label and color code the cutting burs by shape.

Mix and match burs to number ranges:

- | | |
|---------------------------------------|------------|
| 1. _____ round bur | A. 699–703 |
| 2. _____ end-cutting bur | B. 33½–39 |
| 3. _____ plain fissure straight bur | C. ¼–10 |
| 4. _____ crosscut fissure tapered bur | D. 56–60 |
| 5. _____ inverted cone bur | E. 957–958 |

Mix and match burs to number ranges:

- | | |
|--|------------|
| 1. _____ crosscut straight fissure bur | A. 169–172 |
| 2. _____ plain fissure tapered bur | B. 556–560 |
| 3. _____ pear | C. 14 |
| 4. _____ wheel | D. 329–332 |



Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

Diamond Burs, Finishing Burs, Surgical Burs, and Laboratory Burs

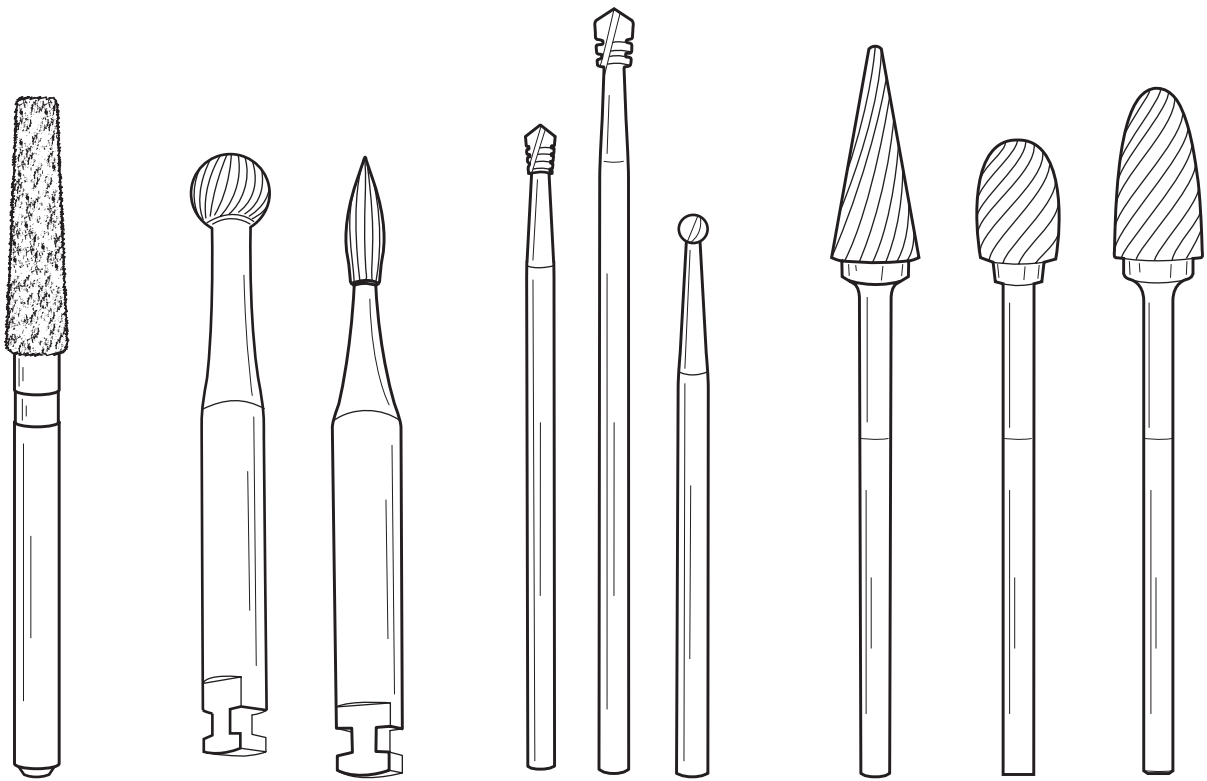
Label and color the surgical burs.

Label and color the diamond burs.

Label and color the laboratory burs.

Label and color the finishing burs.

1. _____ is/are color coded to indicate the coarseness/grit of the bur.
 - A. The finishing bur
 - B. The diamond bur
 - C. The laboratory bur
 - D. The cutting burs
2. Which of the following burs can have up to 30 blades and come in a variety of shapes and sizes?
 - A. the diamond burs
 - B. the cutting burs
 - C. the finishing burs
 - D. the laboratory burs
3. _____ burs reduce and contour alveolar bone and tooth structure, while _____ are used to adjust partials, dentures, and custom trays.



Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

High- and Low-speed Handpieces and Attachments

Label and color the high-speed handpiece.

Label and color the low-speed straight handpiece.

1. Which handpiece has fiber optics? _____

Label and color the fiber optics.

Label and color the right angle.

Label and color the contra-angle.

2. Another name for the right angle is _____.

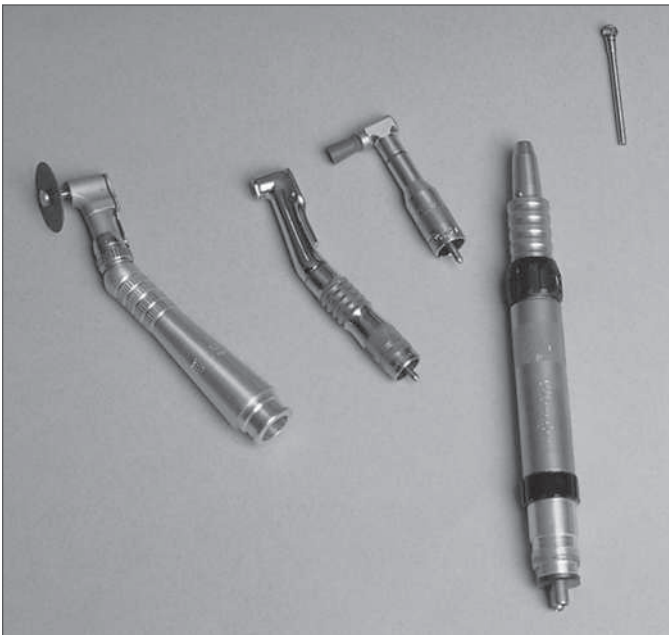
3. The _____ is a small metal cylinder that holds the bur in the handpiece.

4. A _____ is used to activate and control the speed of the handpieces.

5. Label the bur and draw a line to the handpiece it goes with. What type of shank does this bur have? _____



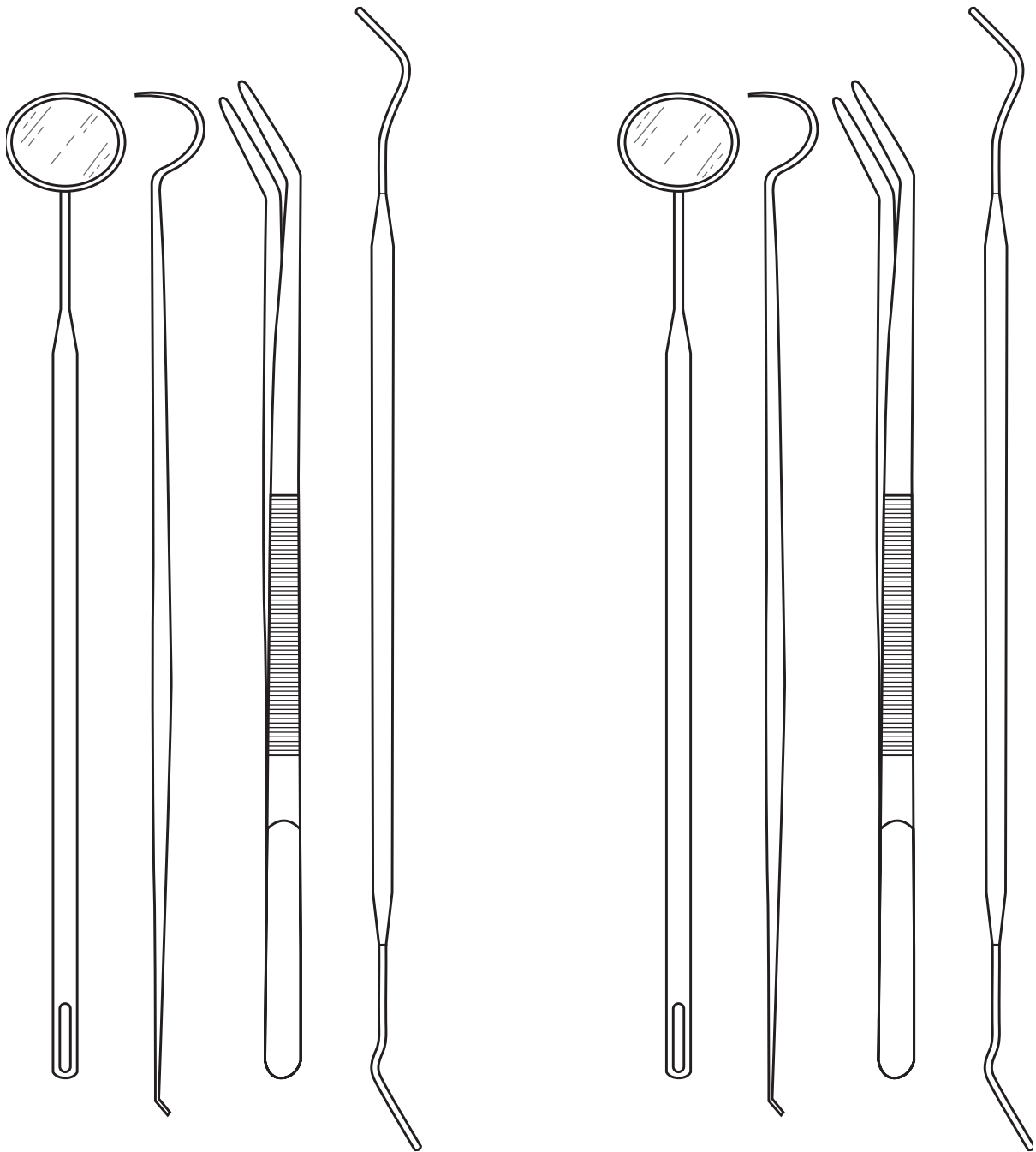
Courtesy of Midwest Dental
Products Corporation,
a division of DENTSPLY
International



Double Color coding

List what the double color coding may indicate:

Color code the instruments to show double color coding.

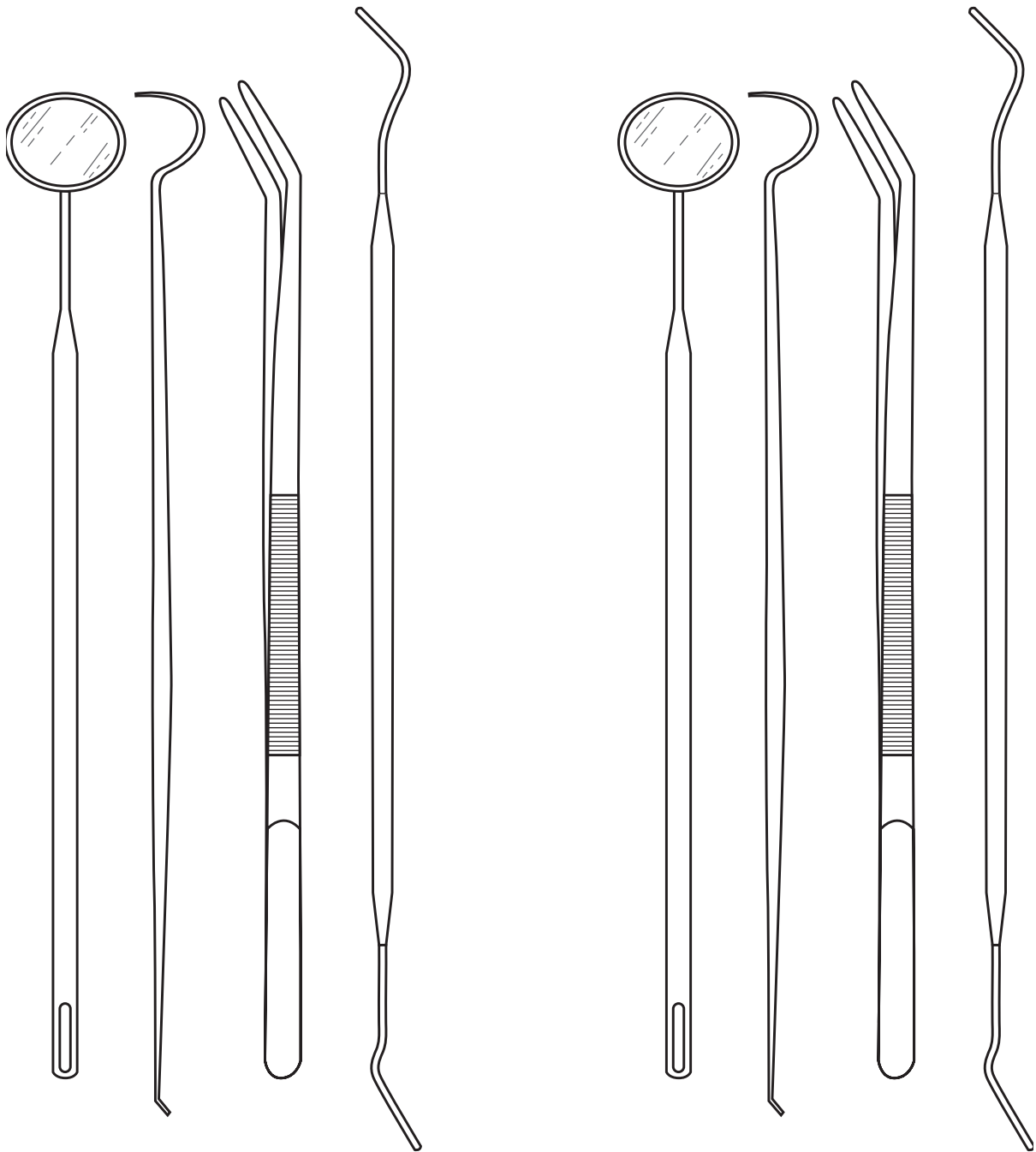


Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

Triple Color coding

When would triple color-coding be necessary?

Triple color-code the instruments and then list what the colors designate.

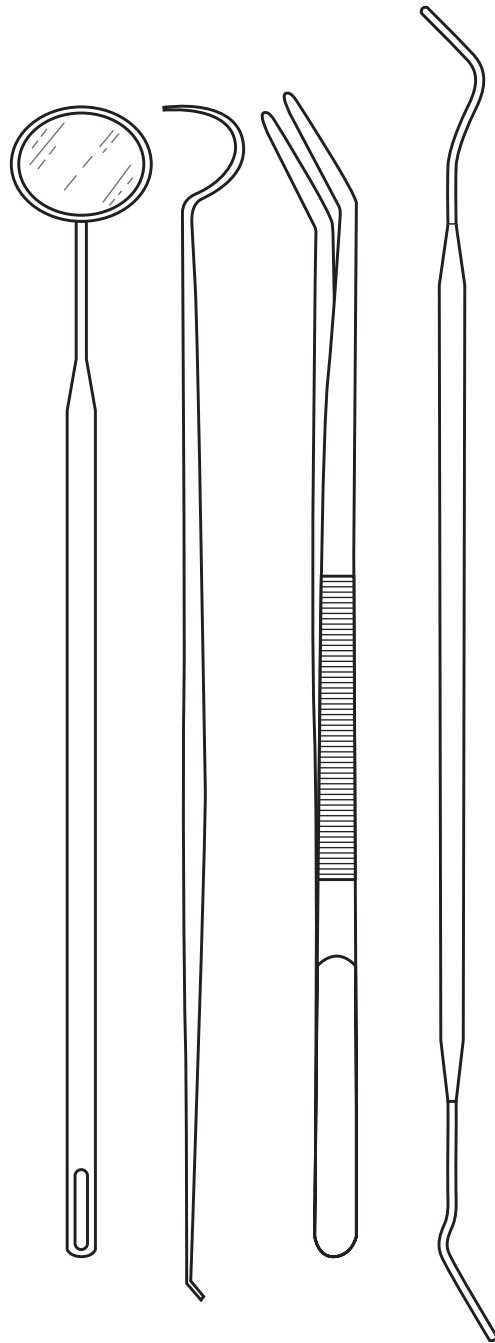


Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

Color-coding for Procedure Sequence

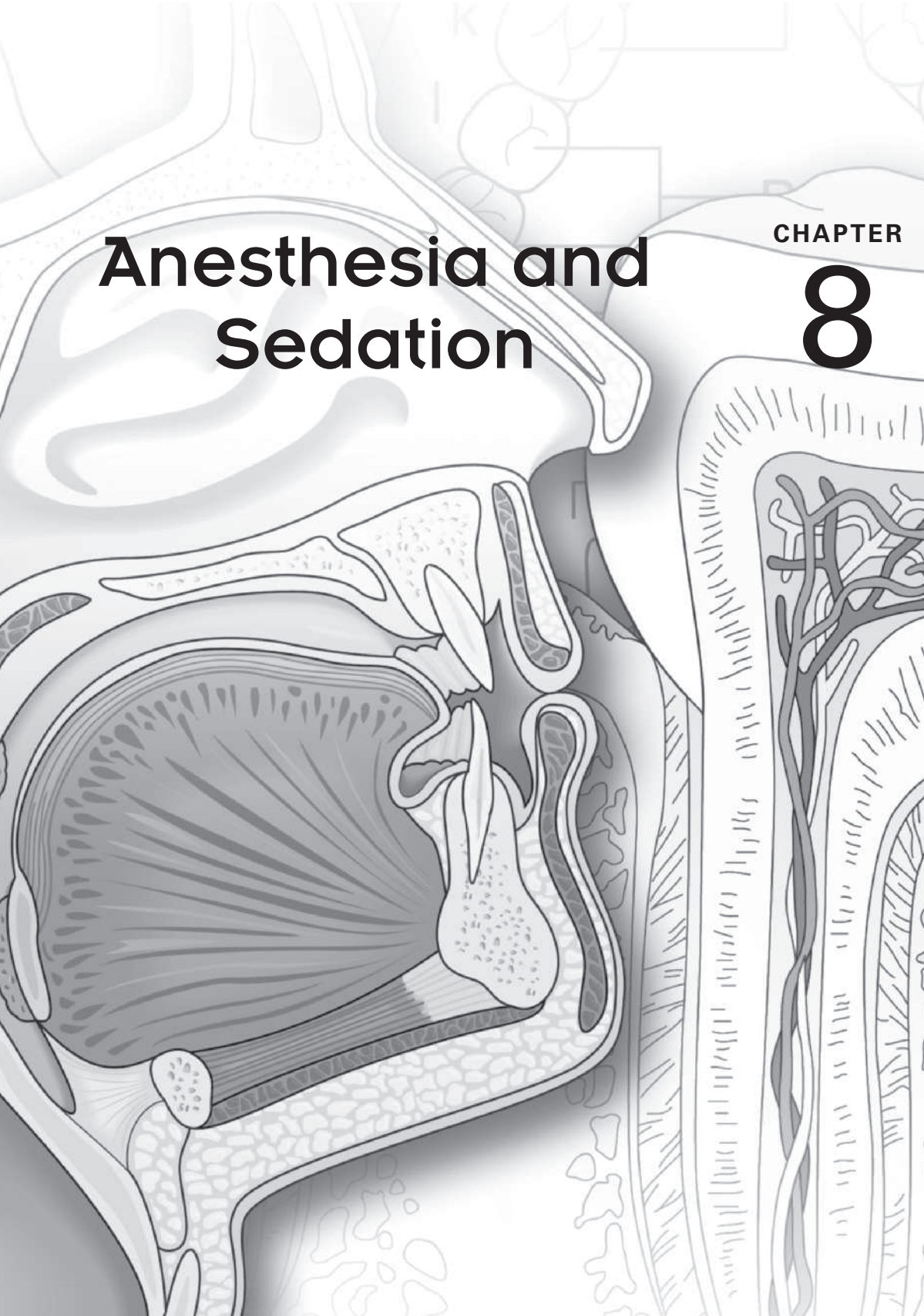
Using double color-coding, color the instruments for the dentist and a second set of instruments for a specific procedure. Arrange the second color to indicate the sequence of the procedure.

List the benefits of color-coding for procedure sequence:



Courtesy of Miltex Instrument Co., Inc., Lake Success, NY

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Anesthesia and Sedation

CHAPTER

8

Types of Anesthetic Injections

List the three types of anesthetic injections:

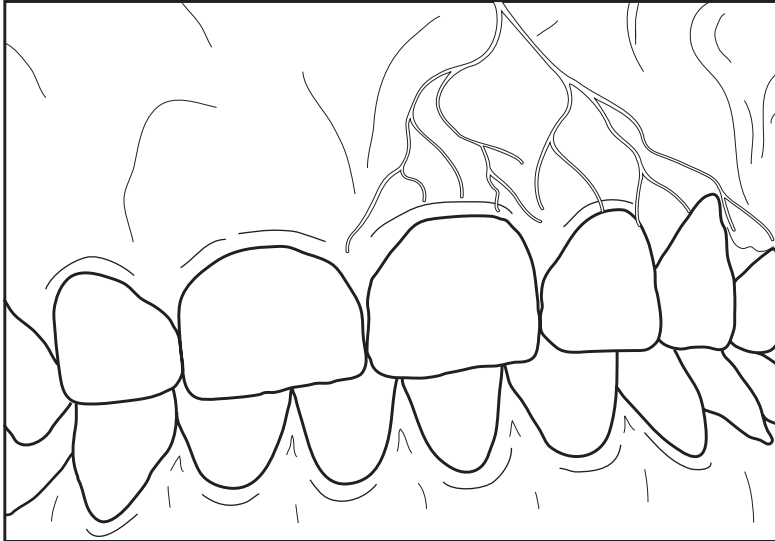
Color the nerve trunk blue.

Color an “X” on the injection site of all three types of anesthetic injections.

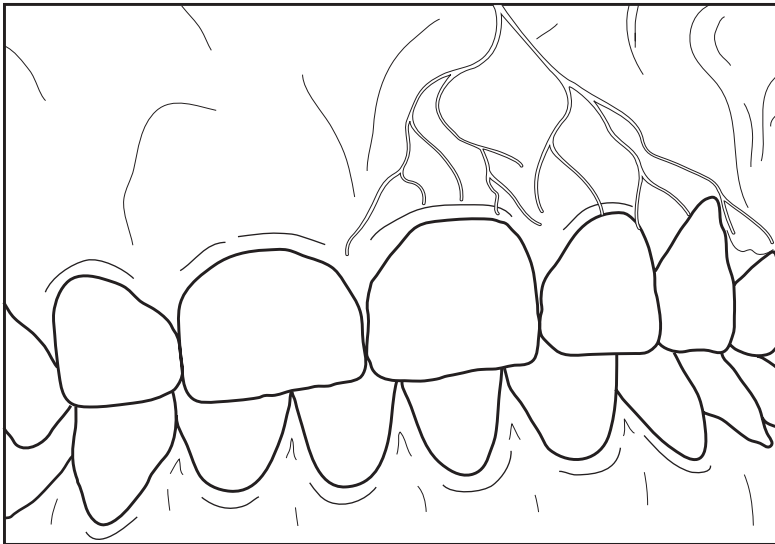
Draw a line and label these sites.

Which of the anesthetic injections places the anesthetic near a main nerve trunk?

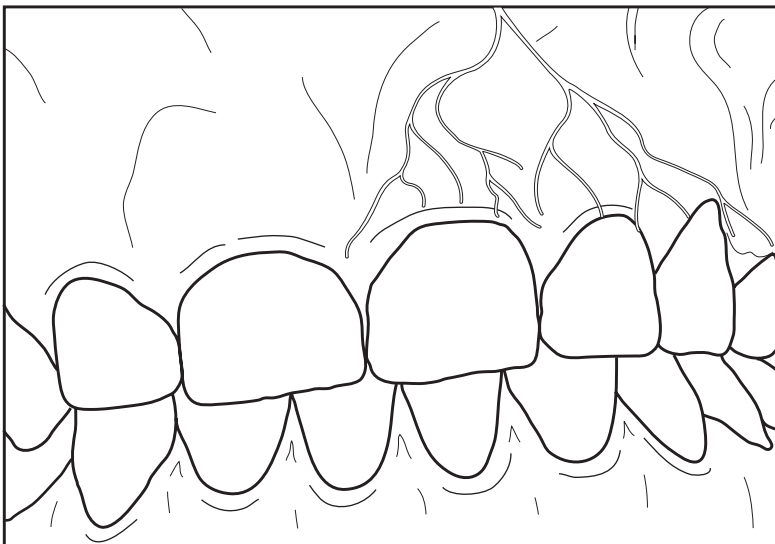
This anesthetic injection places anesthetic solution into the tissues near the small terminal nerve branches. It is the _____.



Courtesy of
Dr. Gary Shellerud



Courtesy of
Dr. Gary Shellerud



Courtesy of
Dr. Gary Shellerud

Maxillary Arch Injections and Site Locations

Mix and match:

- | | |
|--|--|
| 1. _____ anterior superior alveolar nerve block | A. this injection affects the hard palate and soft tissues covering the hard palate |
| 2. _____ greater palatine nerve block | B. this injection is given in the mucobuccal fold at the maxillary second premolar |
| 3. _____ maxillary nerve block | C. this injection is given near the apex of the maxillary second molar toward the distobuccal root |
| 4. _____ middle superior alveolar nerve block | D. this injection is given in the mucobuccal fold above the distal of the maxillary second molar |
| 5. _____ nasopalatine nerve block | E. this injection affects the maxillary central and lateral incisors and cuspid in a quadrant |
| 6. _____ posterior superior alveolar nerve block | F. this injection affects the anterior one-third of the hard palate from canine to canine |

Color an "X" at the injection site of the **anterior superior alveolar nerve block** and then draw a box designating the affected area for this injection.

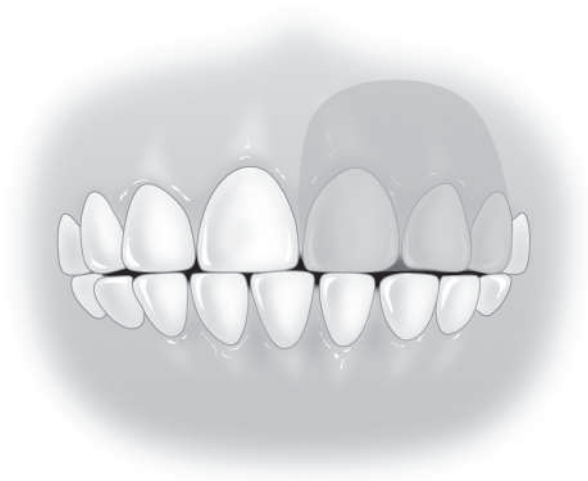
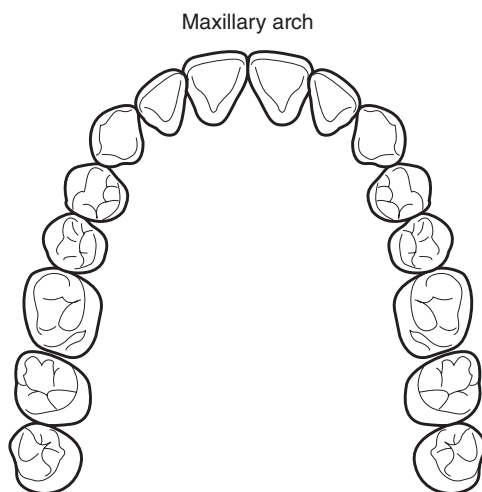
Color an "X" at the injection site of the **greater palatine nerve block** and then draw a box designating the affected area for this injection.

Color an "X" at the injection site of the **maxillary nerve block** and then draw a box designating the affected area for this injection.

Color an "X" at the injection site of the **middle superior alveolar nerve block** and then draw a box designating the affected area for this injection.

Color an "X" at the injection site of the **nasopalatine nerve block** and then draw a box designating the affected area for this injection.

Color an "X" at the injection site of the **posterior superior alveolar nerve block** and then draw a box designating the affected area for this injection.



Mandibular Arch Injections and Site Locations

List the mandibular arch injection sites:

1. Which of the mandibular nerve injections affects a mandibular quadrant including teeth, mucous membrane, two-thirds of the tongue, floor of the mouth, lingual soft tissues, and periosteum? _____

2. Which two mandibular nerve injections are both given near the mental foramen? _____

3. Which three mandibular nerve injections are given at different locations but all behind the last molar? _____

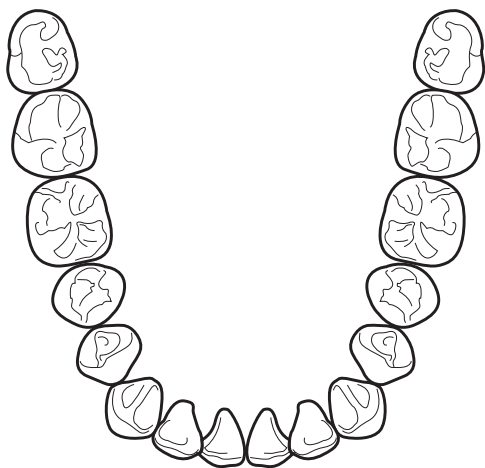
Color an "X" at the injection site of the **buccal nerve block** and then draw a box designating the affected area for this injection.

Color an "X" at the injection site of the **incisive nerve block** and then draw a box designating the affected area for this injection.

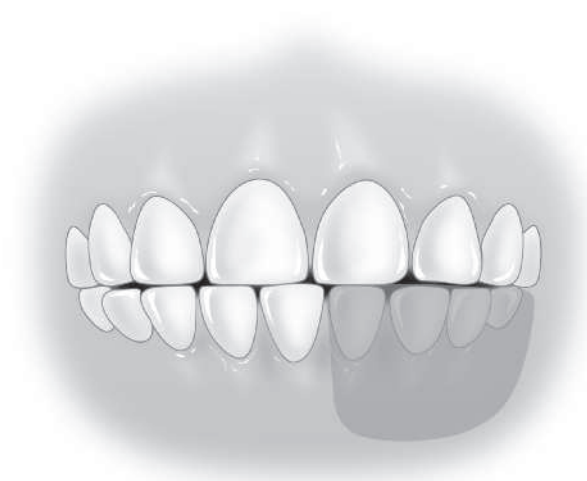
Color an "X" at the injection site of the **inferior alveolar nerve block** and then draw a box designating the affected area for this injection.

Color an "X" at the injection site of the **lingual nerve block** and then draw a box designating the affected area for this injection.

Color an "X" at the injection site of the **mental nerve block** and then draw a box designating the affected area for this injection.



Mandibular arch



Aspirating Syringe

Label and color the parts of the aspirating syringe.

What is another name for the piston rod? _____

All syringes have a harpoon to engage the rubber end of the cartridge.

- A. This is a true statement.
- B. This is a false statement.



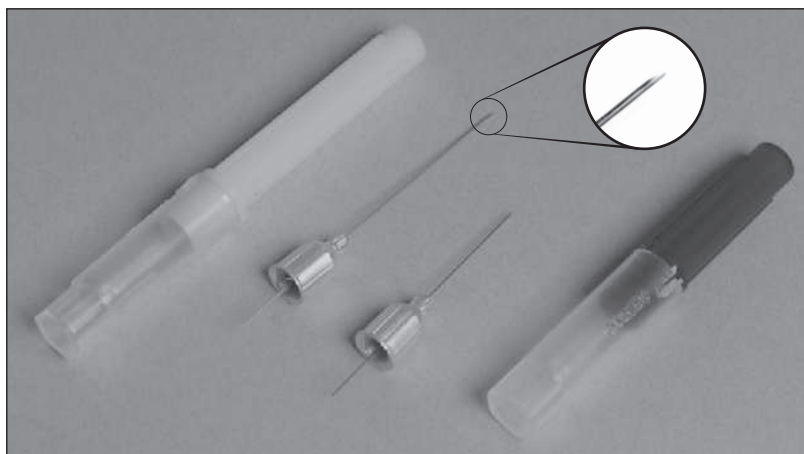
Needle Parts

Label the short needle package and color it blue.

Label the long needle package and color it yellow.

Label and color the following on both the long and short needle: bevel, hub, shank, and syringe end.

1. The long needle is usually used for a(n):
 - A. infiltration injection
 - B. block injection
2. The bevel should be directed _____.
 - A. toward the tissues/bone
 - B. away from the tissues/bone
 - C. either way; will not affect the injection of the anesthetic solution
3. The hub may be made of _____.
 - A. metal
 - B. plastic
 - C. either metal or plastic



Parts of an Anesthetic Cartridge

List the parts of an anesthetic cartridge:

Label and color the parts of an anesthetic cartridge.

List four things to look for with the anesthetic cartridge before using:

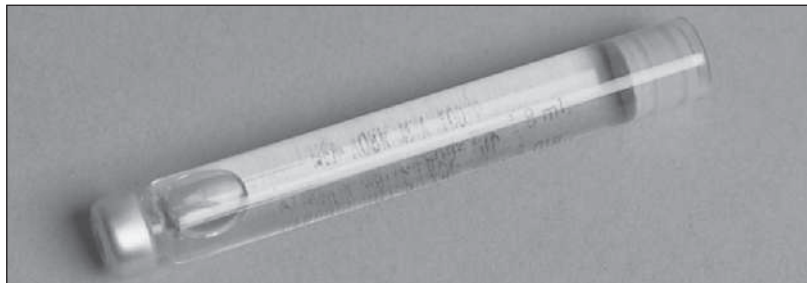
1.

2.

3.

4.

The diaphragm is located on which end of the cartridge?



Information on the Anesthetic Cartridge

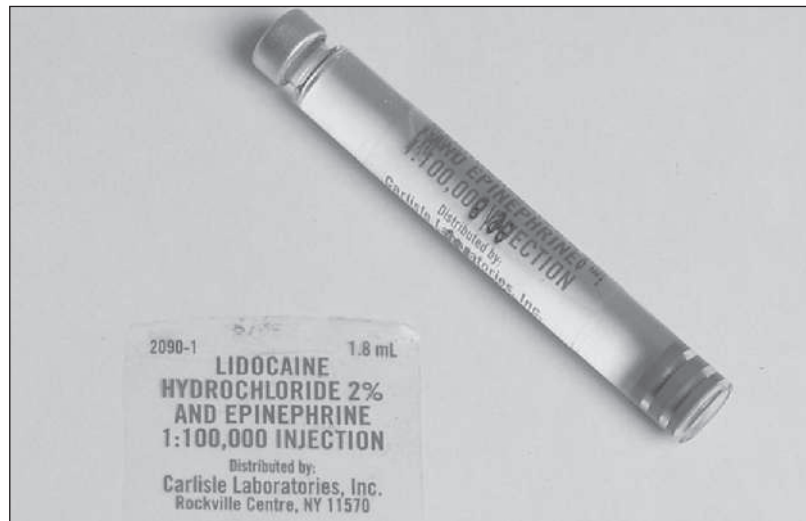
Label and color the following parts of the anesthetic cartridge: aluminum cap, neck/hub, glass cylinder, rubber diaphragm and rubber stopper

Outline the glass cylinder of the anesthetic cartridge.

List the information found on the anesthetic cartridge:

Mix and match:

- | | |
|------------------------------|---|
| 1. _____ Mylar plastic label | A. ratio of vasoconstrictor to solution |
| 2. _____ 1:100,000 | B. ADA system to identify anesthetics |
| 3. _____ Lidocaine | C. thin plastic cover on all glass cartridges |
| 4. _____ color-coding | D. brand name of solution |



Equipment and Supplies Needed to Prepare an Anesthetic Syringe

Label and outline the anesthetic syringe.

Label the long and short needle, then color the short anesthetic needle blue and the long anesthetic needle yellow.

Draw an arrow to and label the anesthetic cartridges.

Label and color the materials needed to place topical anesthetic.

Draw an arrow to and label the needle holder used for recapping.



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CHAPTER
Dental X-ray Film and Holding Devices 9

Electromagnetic Energy Spectrum and Applications

Color the area where electricity falls on the meter/angstrom scale in red.

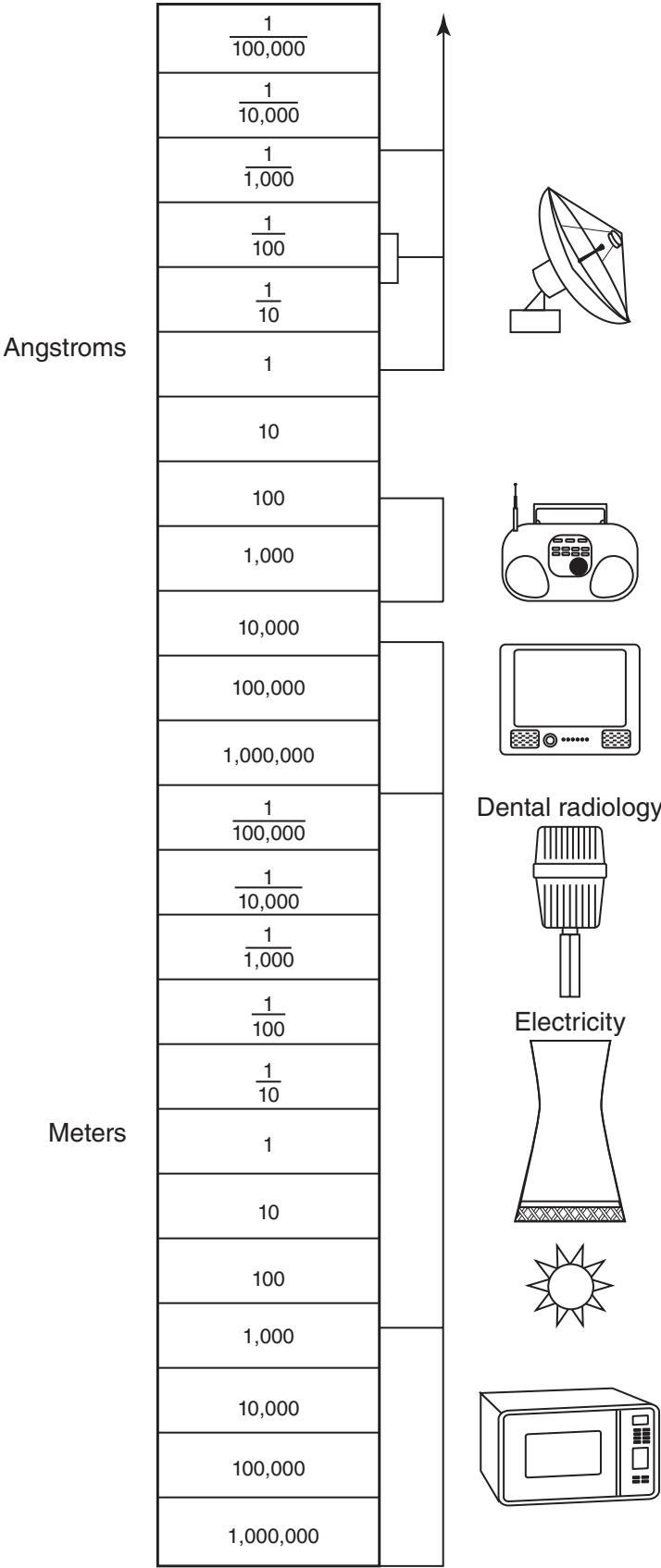
Color the area where a television radio and radar would fall on the meter/angstrom scale in yellow.

Color the area on the meter/angstrom scale where a microwave would fall in blue.

Color the area where the sun would fall on the meter/angstrom scale in green.

Color the area where X-rays fall on the meter/angstrom scale in orange.

Match the noted illustrations to the correct area.

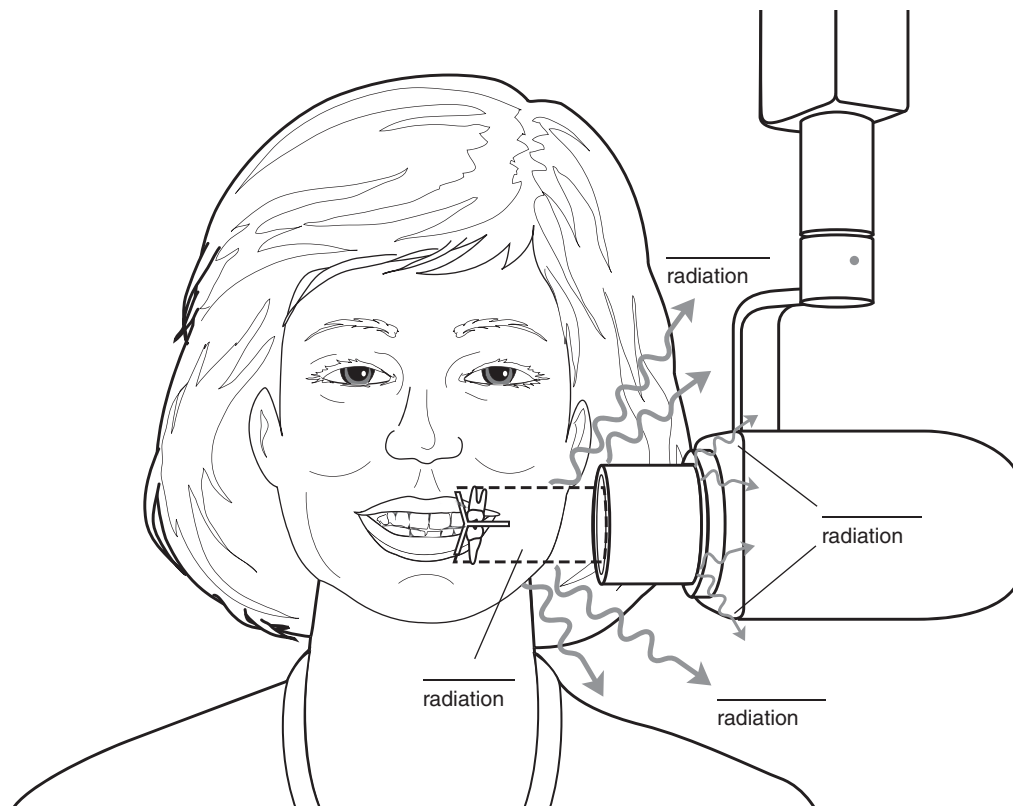


Primary, Secondary, and Leakage Radiation

Label and color the radiation shown on the illustration using the noted colors below.

Mix and match:

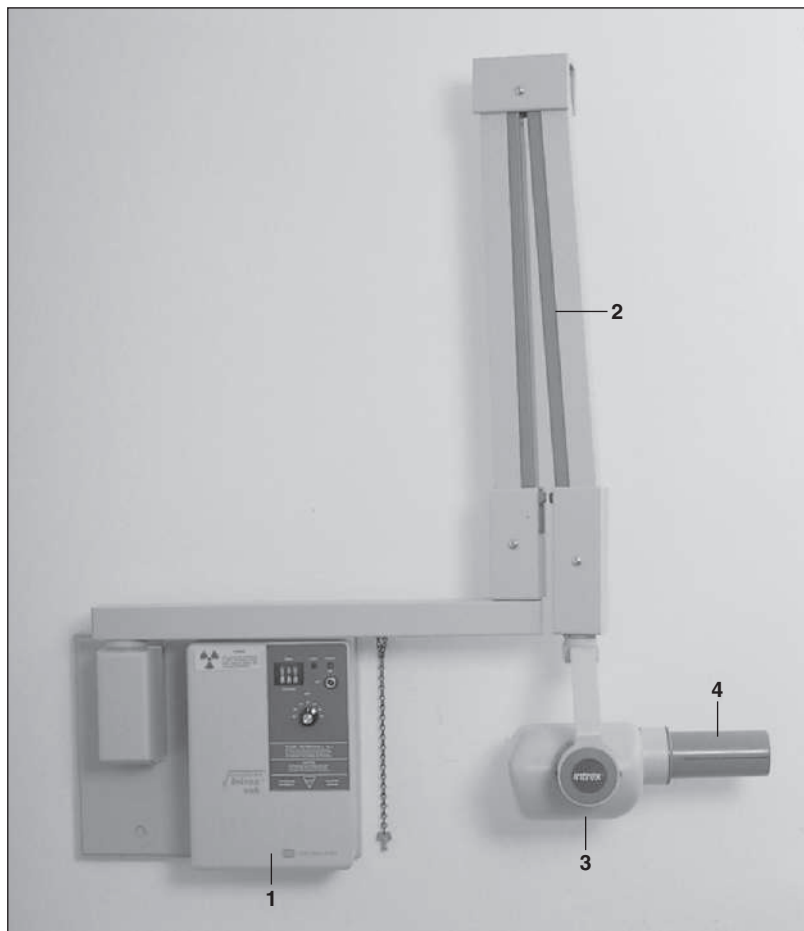
- | | |
|-----------------------------------|--|
| 1. _____ red primary radiation | A. radiation that escapes in all directions from the tube head |
| 2. _____ blue secondary radiation | B. radiation that is deflected from its path as it strikes matter |
| 3. _____ yellow leakage radiation | C. the central beam |
| 4. _____ green scatter radiation | D. radiation that forms when X-rays strike the patient or contact matter |



Parts of Dental Arm Assembly

Identify and color the parts of the dental arm assembly.

1. The _____ allows the operator to freely position the tube head for the various positions required for dental radiography exposures.
2. The _____ is where the X-ray vacuum tube and step down transformers are located.
3. A name used for the cone is the _____.
4. The _____ is where the circuit boards and controls that allow the operator to adjust the correct setting for each patient are located.

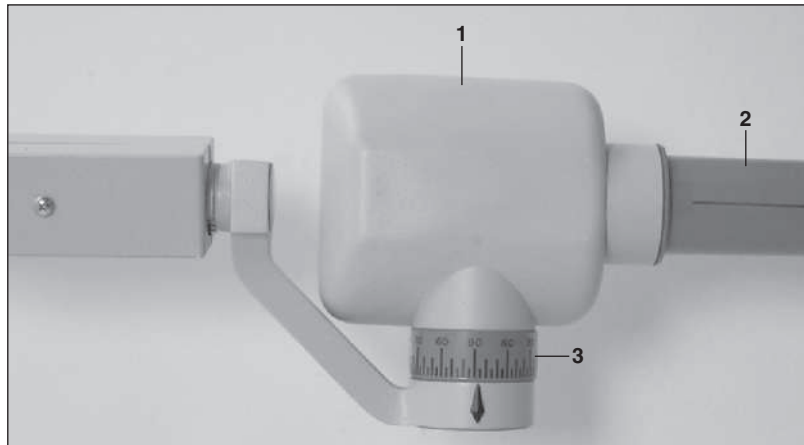


Tube Head, PID, and Vertical Indicator Scale

Label and color the tube head, position indicator device, and the vertical indicator scale.

Using the words “xraytubes,” fill out the Sudoku puzzle below.

E				R			T	B
	T	X	Y			R		
		B	T	E		A		
X	E		S				A	Y
Y	B				A	U		T
	A	Y	X	T				U
	S			B		Y		X
			E				B	

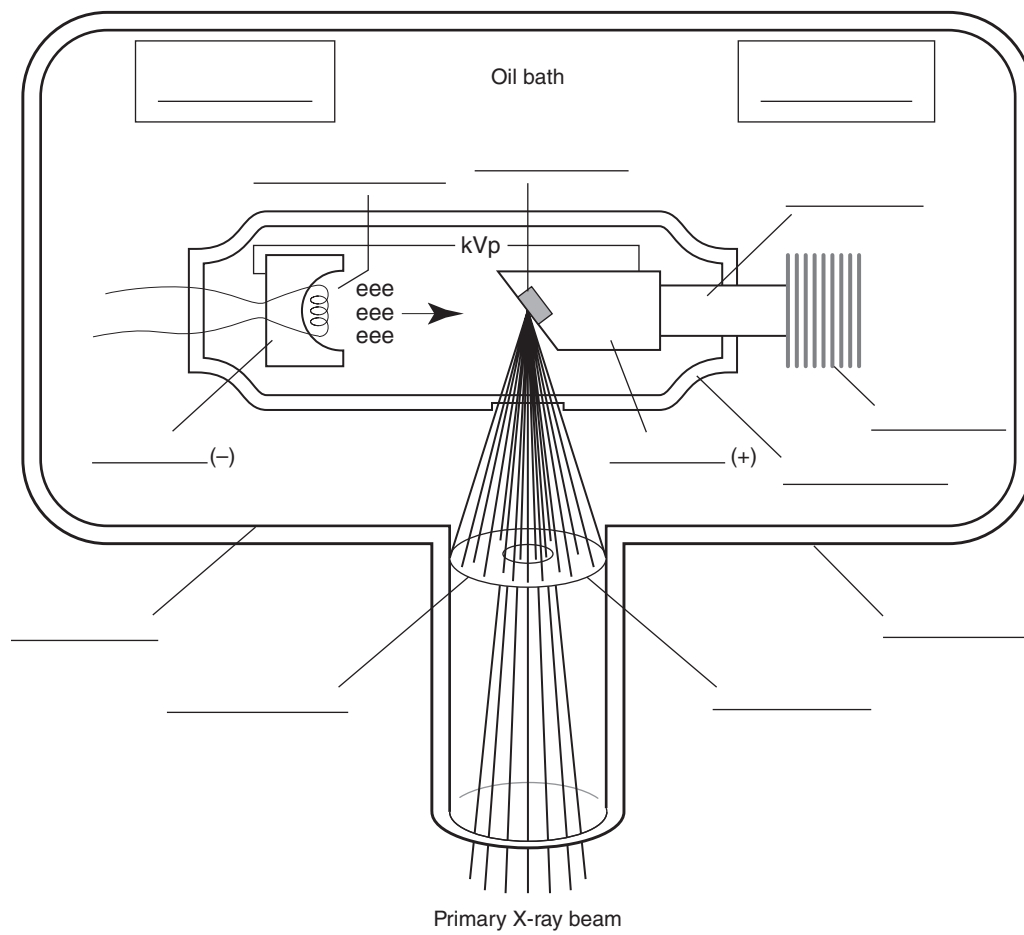


Tube Head and X-ray Tube

Label and color the following devices on the diagram: step up transformer, step down transformer, tungsten filament and focusing cup, tungsten target, anode, cathode, heat radiator, copperstem, lead lining, lead diaphragm (collimator), aluminum filter and metal casing.

Fill in the following with either “cathode” or “anode”:

1. _____ negative
2. _____ positive
3. _____ tungsten filament and focusing cup
4. _____ copper stem
5. _____ tungsten target

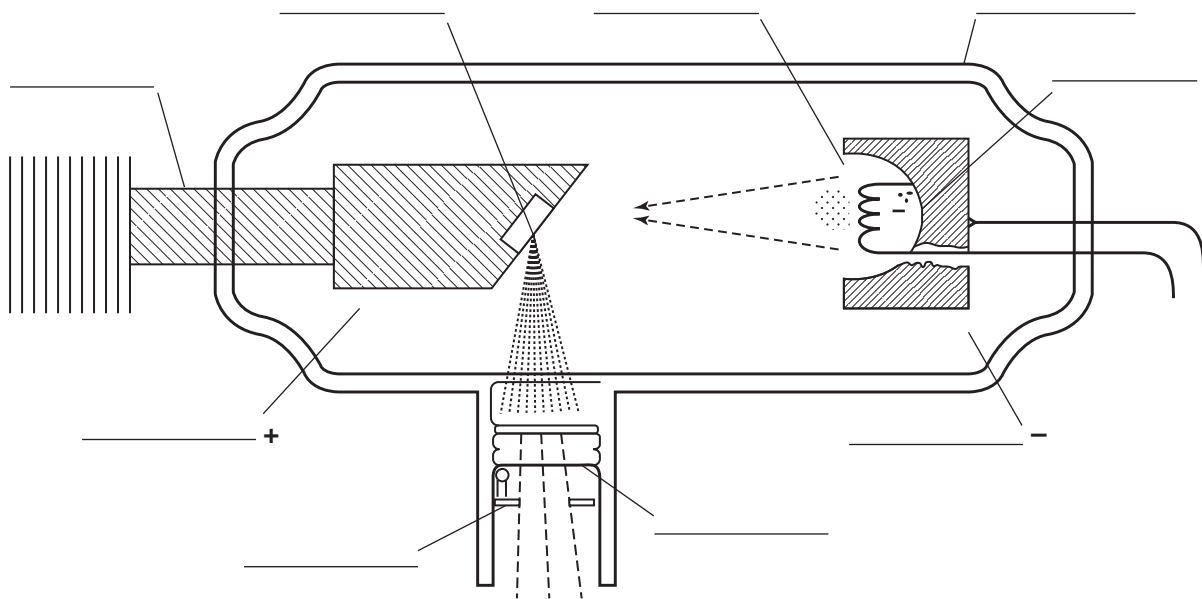


X-ray Tube

Label and color the following on the X-ray tube: copper stem, aluminum filter, diaphragm, anode, cathode, tungsten filament and focusing cup, tungsten target, glass envelope.

Fill in the blanks:

1. The _____ is a lead disc with an opening in the middle that restructures the beam.
2. The name of the primary type of radiation in the X-ray beam going from the tube head is _____.
3. The small spot on the tungsten target where the electrons hit is called the _____.



Composition of Dental X-ray Film

Label and color the composition of a dental X-ray film on the illustration:

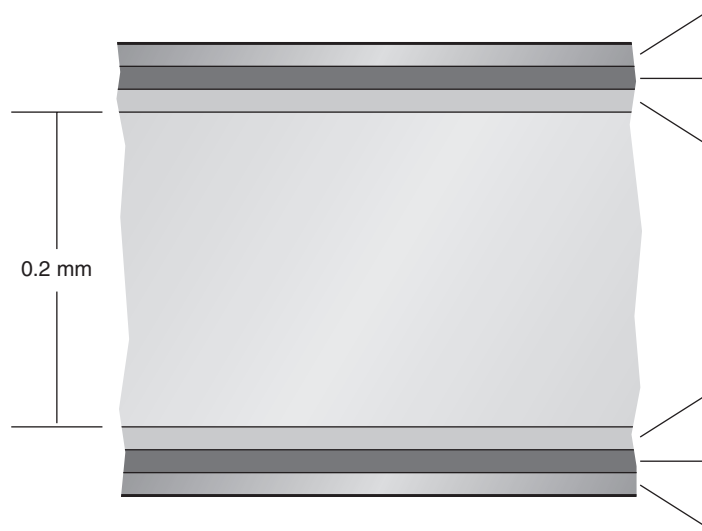
emulsion red

transparent base yellow

adhesive layer blue

protective coating layer green

1. A dental X-ray film is composed of a flexible, thin base which is about _____ thick.
2. This base normally has a slightly _____ tint to it.
3. This base is made from _____.

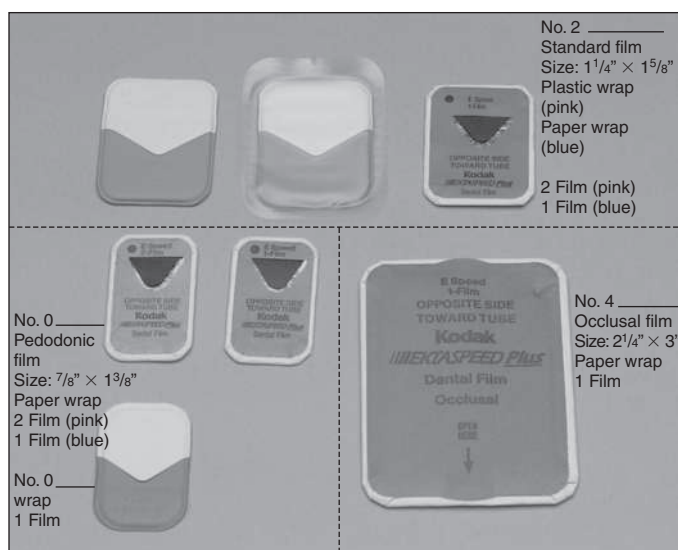


Sizes of Dental X-ray Film

Label the film sizes and color on the illustration.

Mix and match:

- | | |
|------------------------------------|----------|
| 1. _____ adult size | A. No. 0 |
| 2. _____ long bite-wing film size | B. No. 1 |
| 3. _____ child size | C. No. 2 |
| 4. _____ occlusal film size | D. No. 3 |
| 5. _____ narrow anterior film size | E. No. 4 |

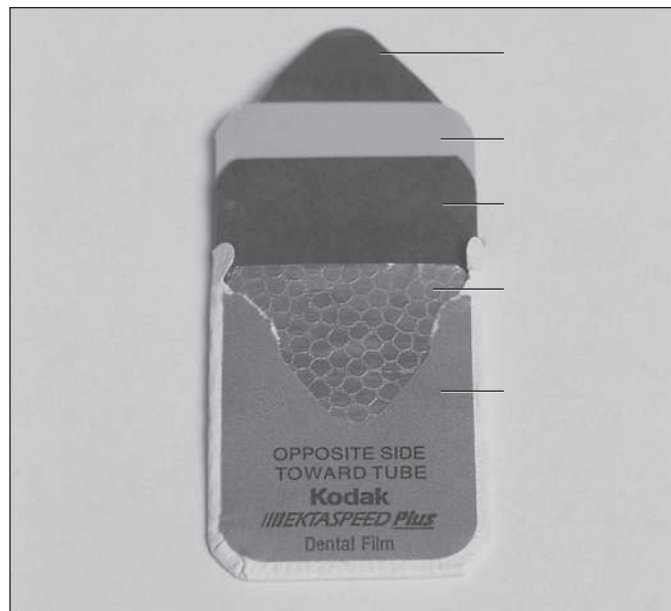


Film Packet

Label the parts of the film packet.

True or false:

- _____ Film packets come in double films.
- _____ Film packets come in triple films.
- _____ Package color and numbering may differ from one manufacturer to another.
- _____ Dental film can be stored at high temperatures.
- _____ Dental film can be stored in the refrigerator.



Film Holding Devices

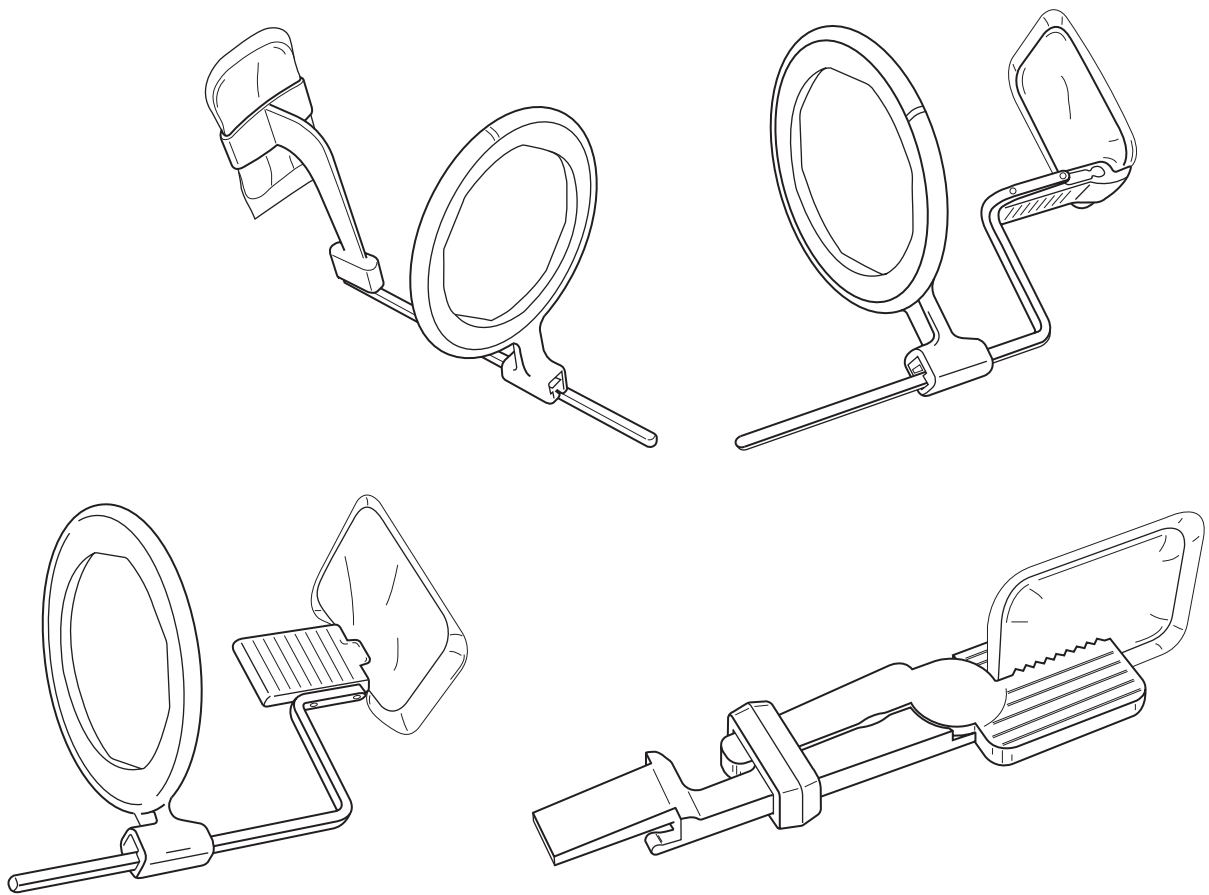
Color the RINN bite-wing setup red.

Color the RINN anterior setup blue.

Color the RINN posterior setup yellow.

Color the Snap-A-Ray setup green.

The abbreviation PID stands for _____. Identify some of the film holding devices that are available. _____



Rinn XCP

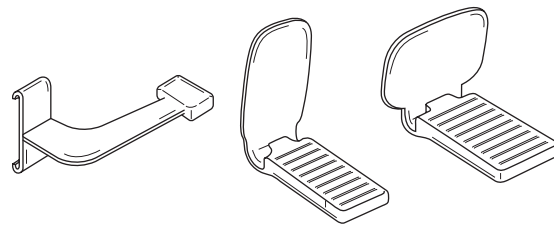
Label and color the bite blocks: red for anterior, blue for posterior, and green for bite-wings.

Picking the correct setup:

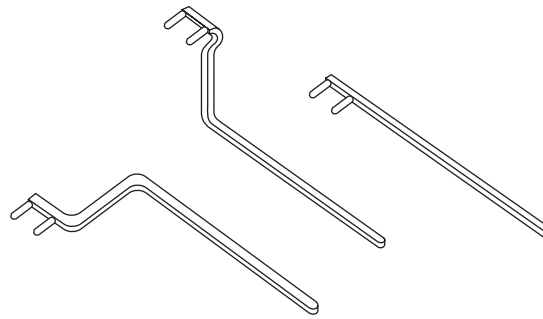
Identify the correct bite block, arm, and ring for the anterior placement.

Identify the correct bite block, arm, and ring for the posterior placement.

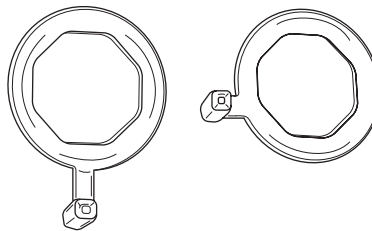
Identify the correct bite block, arm, and ring for the bite-wing placement.



(A)



(B)



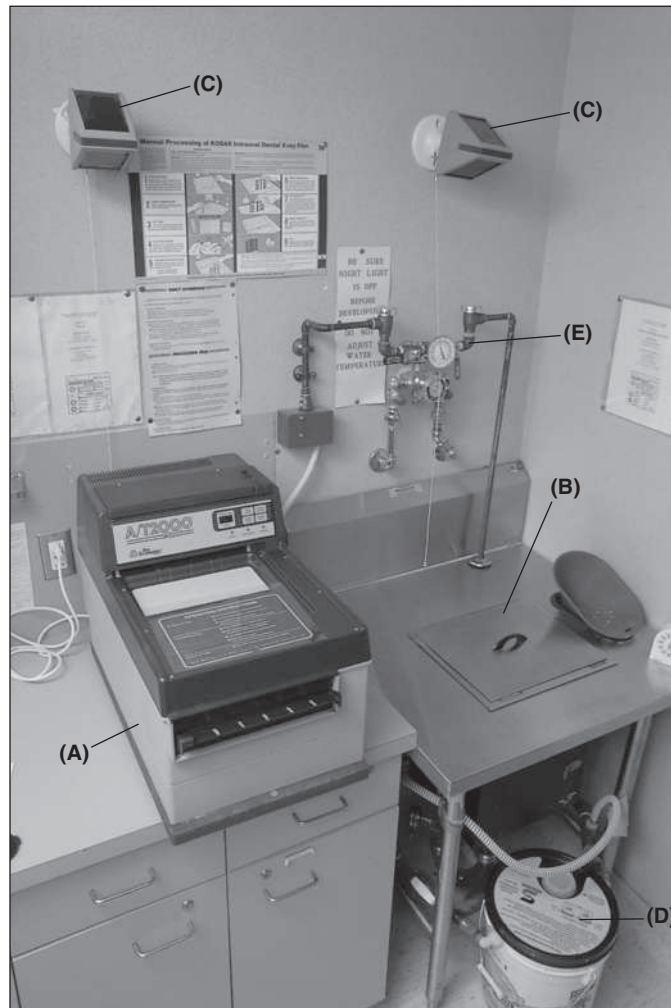
(C)

Processing Room

Identify and label each of the following in the processing room: automatic processor, silver recovery unit, manual processing tank, thermostatic water control, and safelights.

1. Manual processing tanks are made from _____.
2. Automatic processing does not move the film through which procedure?

3. What metal would you find at the bottom of the fixer in a manual tank?



Manual Processing Tank

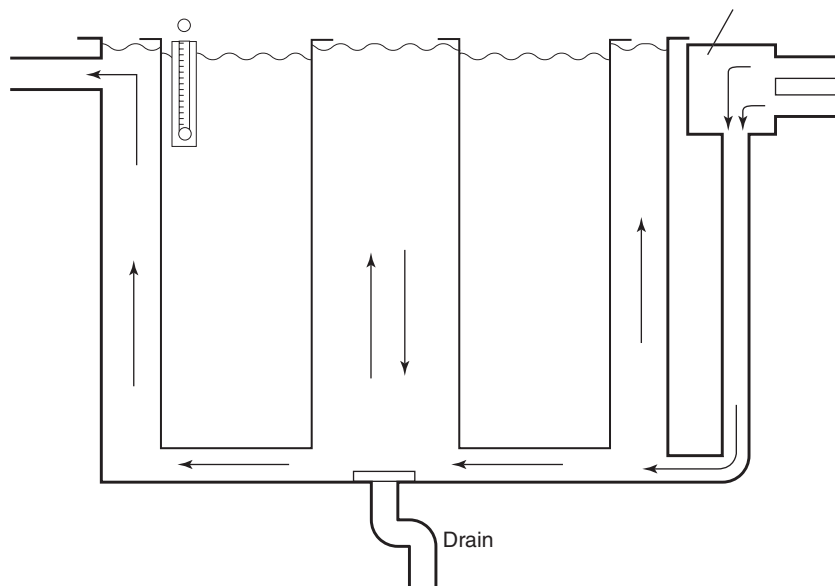
Label the compartments in the manual processing tank.

Color the developer green.

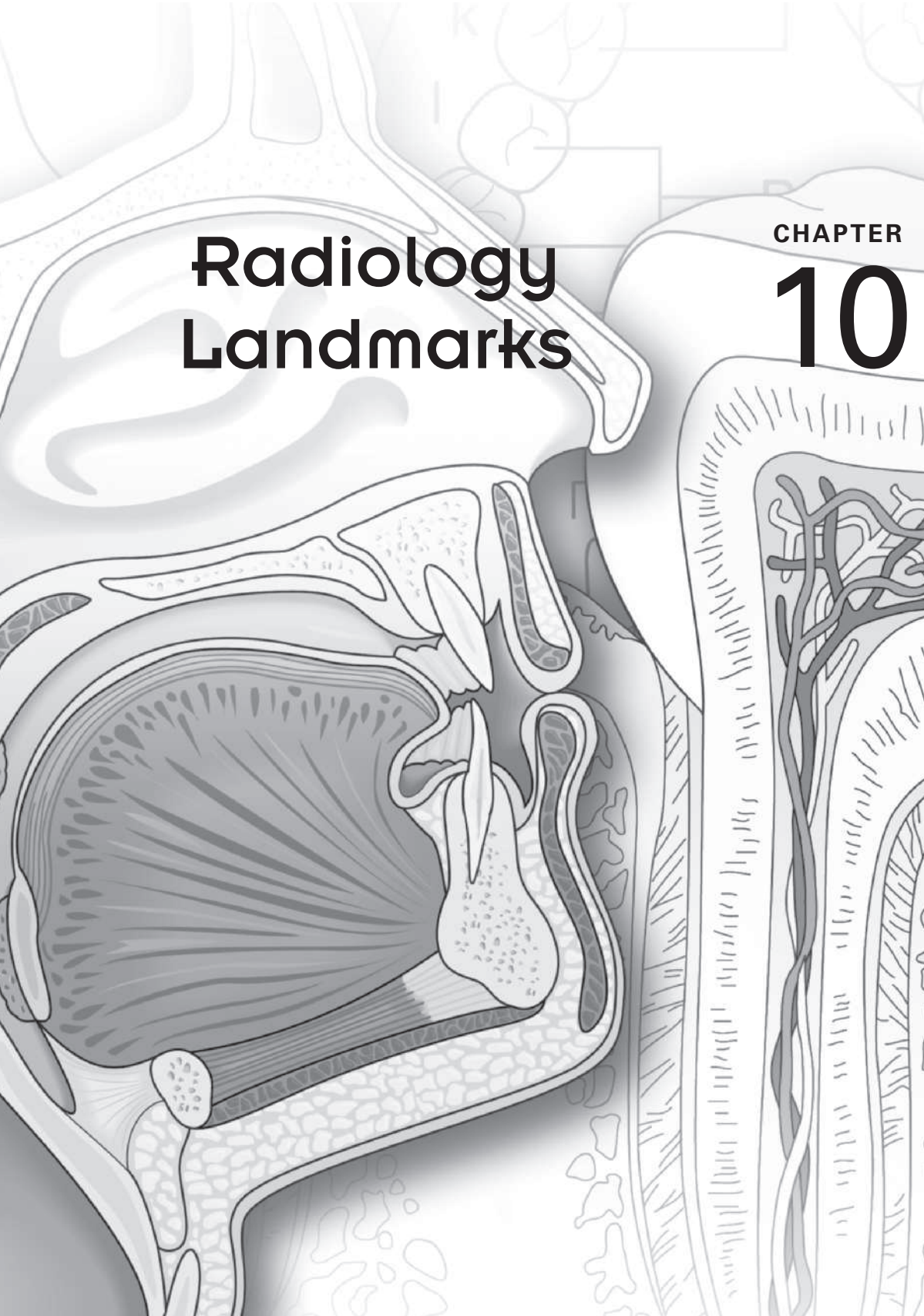
Color the fixer red.

Color the water blue.

1. Where is the thermometer kept in the dental X-ray processing tank? _____
2. What is the optimum temperature for the processing solution? _____
3. Is the temperature in the automatic processor normally higher or lower than the manual tank? _____



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Radiology Landmarks

CHAPTER

10

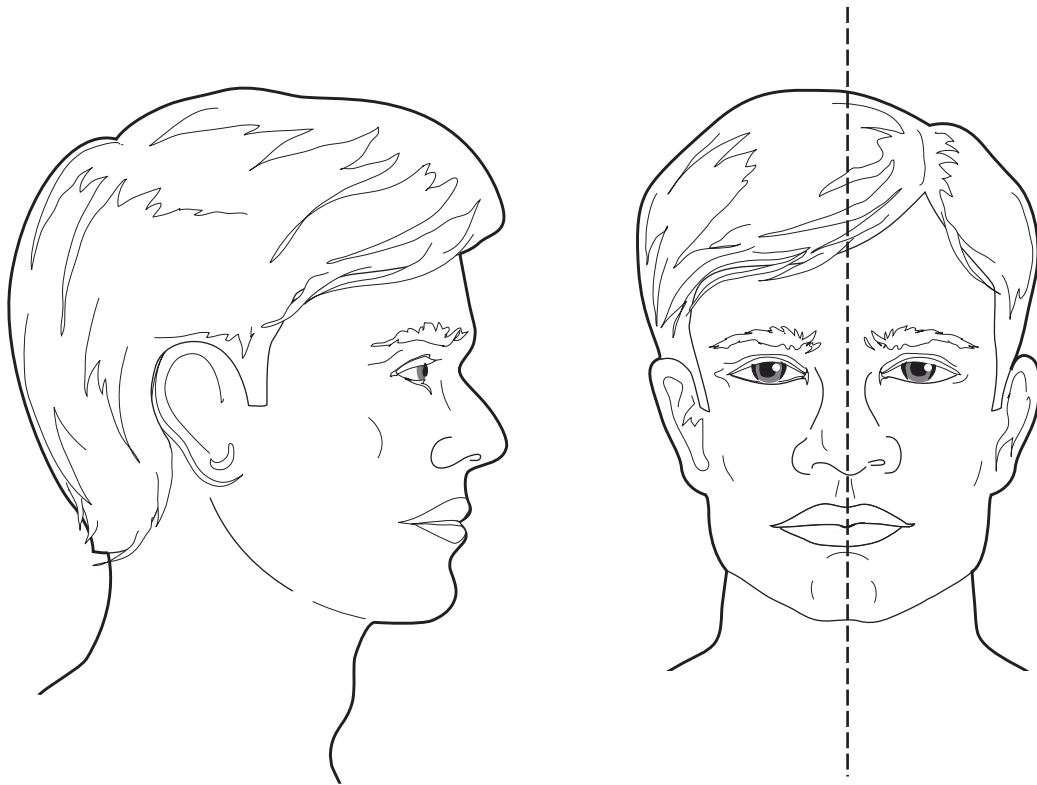
Landmark Planes for Exposing Radiographs of the Face

Draw and label a line for the midsagittal plane on the frontal view.

Draw and label a line for the Frankfort plane.

Draw and label a line for the ala tragus plane.

1. The ala tragus plane goes from the _____ to the _____.
2. The Frankfort plane goes from the _____ to the _____.
3. The Frankfort plane must be parallel with the floor when exposing _____.
4. The ala tragus plane must be parallel with the floor when exposing _____.



Landmarks for the Tooth and Surrounding Tissues

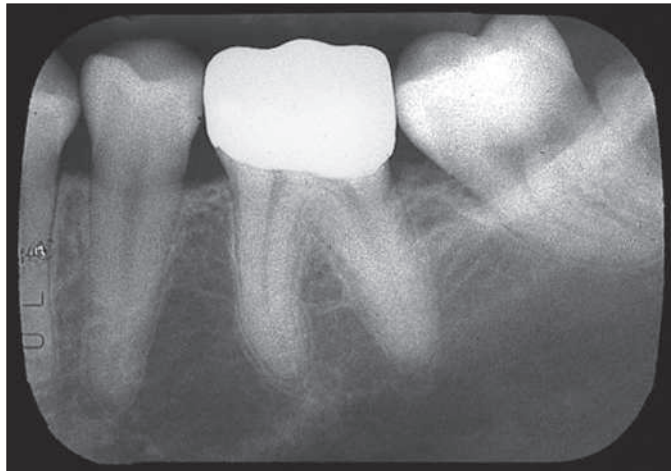
On the mandibular second premolar, label and color the following: enamel, dentin, pulp, and the pulp chamber.

On the mandibular first molar, label and color the following: cementum, periodontal ligament, lamina dura, root canal, and interradicular bone.

On the mandibular third molar (second molar is missing), label and color the following: enamel, dentin, the dentin enamel junction, pulp chamber, and root canal.

Label and color the interdental bone between the second premolar, first molar, and third molar.

1. Which of the following are radiolucent on an X-ray?
 - A. lamina dura
 - B. periodontal ligament
 - C. pulp chamber
 - D. all of the above
2. What type of restoration is on the first molar?
 - A. MOD amalgam
 - B. gold crown
 - C. MODL composite
 - D. none of the above



Landmarks for the Surrounding Tissues Continued

Mix and match:

- | | |
|-----------------------|--|
| 1. lingual foramen | A. raised area of bone surrounding the lingual foramen |
| 2. genial tubercles | B. found on the center of the hard palate |
| 3. trabecular pattern | C. found below the mandibular central incisors |
| 4. incisive foramen | D. spongy appearance of the alveolar bone |

Label and outline in color the two maxillary central incisors.

Label and outline in color the two mandibular central incisors.

Label and color the incisive foramen.

Label and color the lingual foramen and the genial tubercles.

Label and color (shade in a light color) the trabecular pattern of the alveolar bone on both X-rays.



Courtesy of Dr. Rodney Braun and Dr. Chris Chaffin

Landmarks for the Maxillary Arch

1. Which of the following teeth is/are impacted?
 - A. right cuspid
 - B. left cuspid
 - C. right third molar
 - D. left third molar
2. The maxillary sinuses are above:
 - A. the two central incisors
 - B. the molars
 - C. the cuspids
 - D. the lateral incisors
3. There is overlapping between the _____.
 - A. premolars and cuspids
 - B. molars
 - C. cuspids and laterals
 - D. central incisors

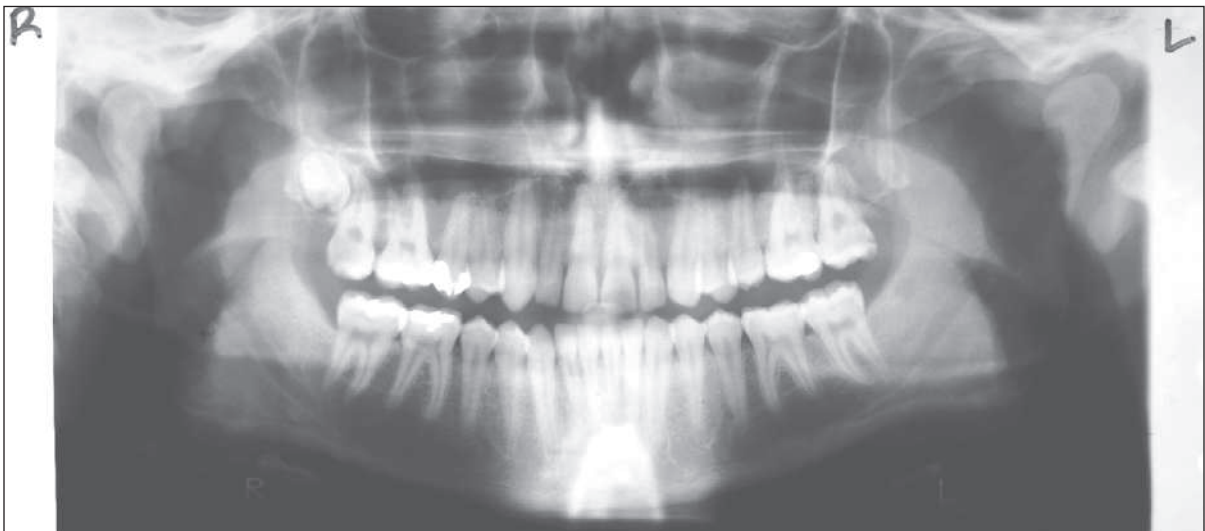
Label and outline in color the following: mastoid process, external auditory meatus, and the glenoid fossa on the temporal bone.

Label and outline in color the maxillary sinus, zygomatic process, hard palate, and orbit.

Label and outline in color the nasal fossa, nasal septum, and nasal conchae.

Label and color the incisive foramen and the maxillary tuberosity.

Label the maxillary teeth using the universal system of numbering.



Courtesy of Dr. Rodney Braun and Dr. Chris Chaffin

Landmarks for the Mandibular Arch

1. Which of the following landmarks is part of the temporomandibular joint?
 - A. coronoid process
 - B. mental foramen
 - C. condyle process
 - D. retromolar process
2. The mental foramen is located:
 - A. behind the last posterior molar
 - B. between the first and second molars
 - C. between the two central incisors
 - D. between the first and second premolars

List, label, and outline in color the parts of the mandible.

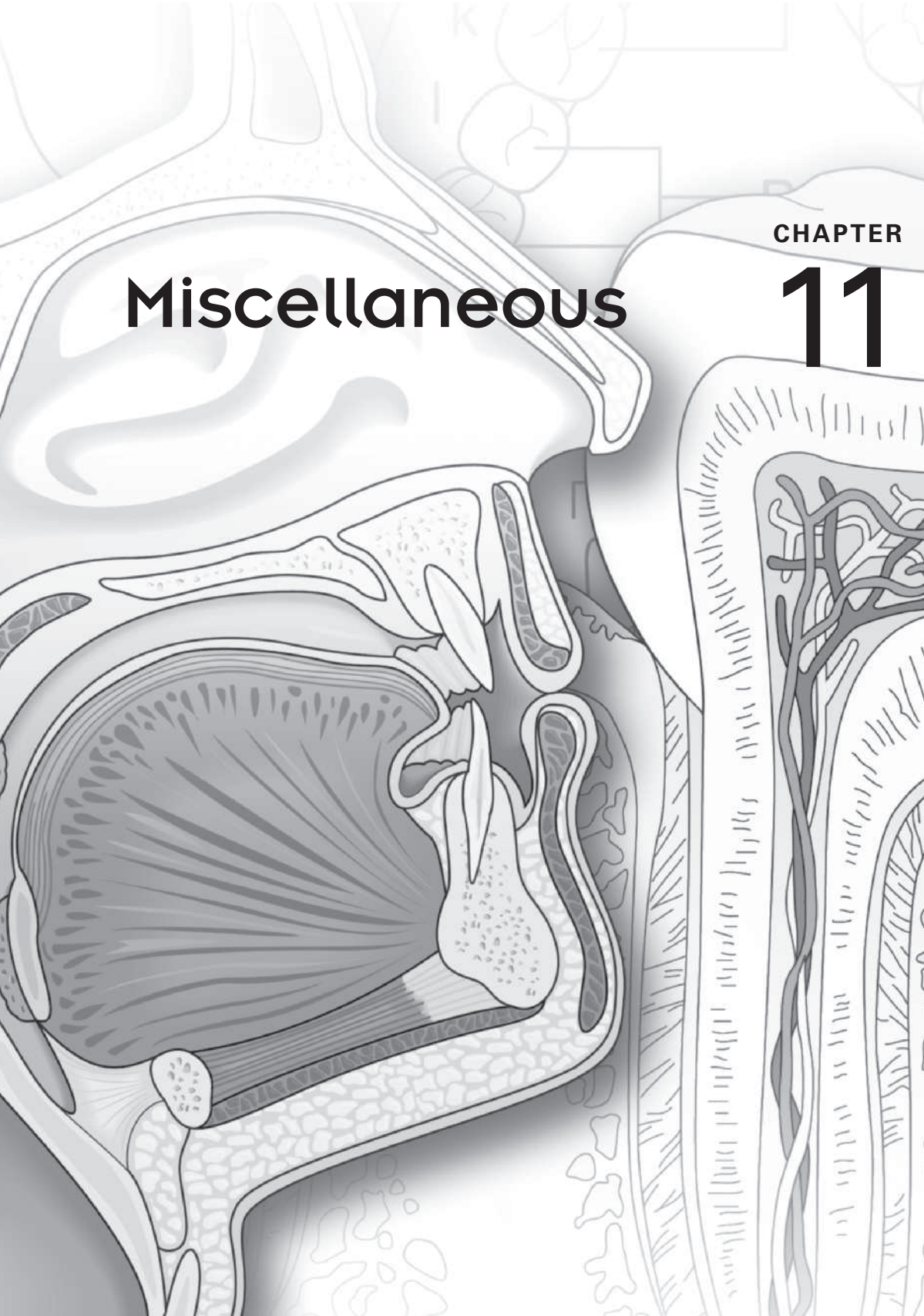
Label and outline in color the retromolar pad and the alveolar crest.

Label the mandibular teeth using the universal system of numbering.



Courtesy of Dr. Rodney Braun and Dr. Chris Chaffin

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Miscellaneous

CHAPTER

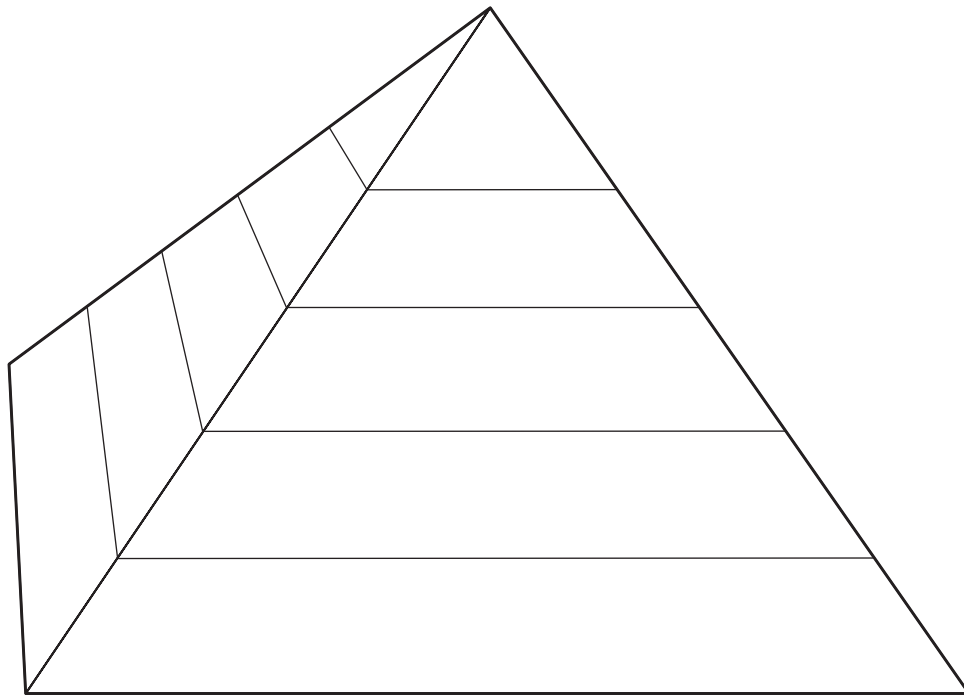
11

Maslow's Hierarchy of Needs

Color and label each level in Maslow's hierarchy of needs.

Mix and match:

- | | |
|--|------------------------------------|
| 1. _____ bottom layer of Maslow's hierarchy of needs | A. safety needs |
| 2. _____ second from the bottom layer of Maslow's hierarchy of needs | B. self-actualization |
| 3. _____ middle layer of Maslow's hierarchy of needs | C. survival or Physiological needs |
| 4. _____ next to the top layer of Maslow's hierarchy of needs | D. belongingness and Love needs |
| 5. _____ highest layer of Maslow's hierarchy of needs | E. prestige and Esteem needs |

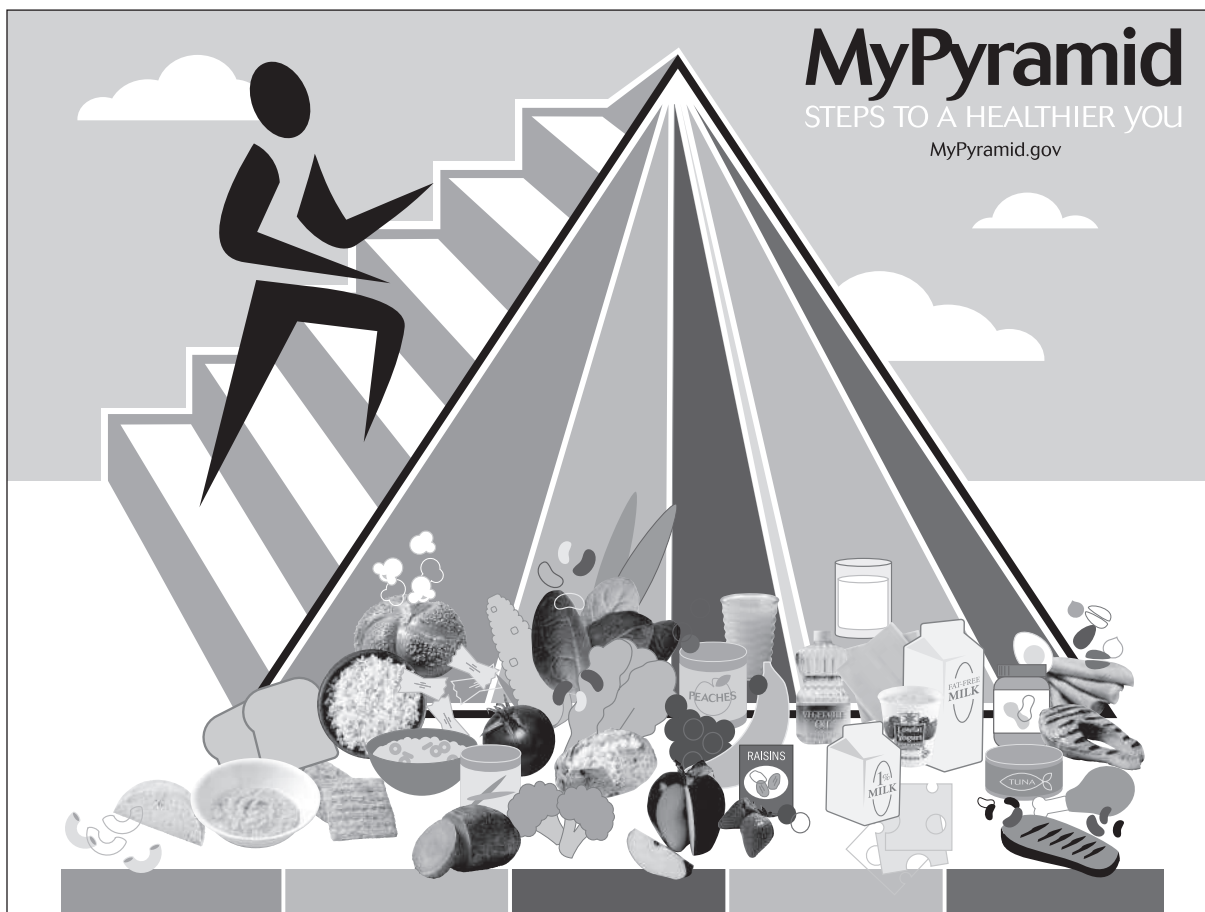


Food Guide Pyramid

Label, color, and identify the servings for each area in the Food Guide Pyramid.

Fill in the blanks:

1. Butter belongs in the _____ food group.
2. Rice and pasta belong in the _____ food group.
3. Bananas and pears belong in the _____ food group.
4. Yogurt belongs in the _____ food group.
5. Nuts belong in the _____ food group.



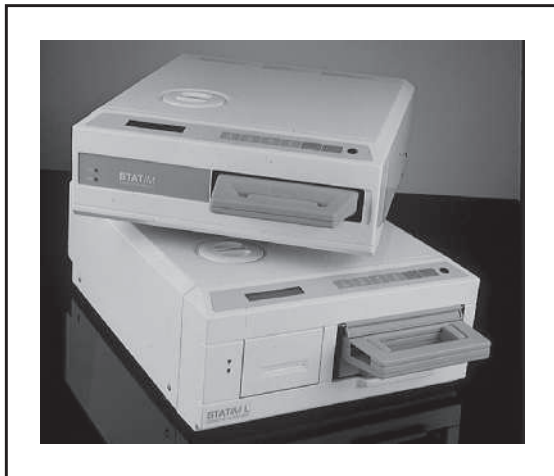
Sterilizers

Match the color of the box to the color of the outside of the box and identify the type of sterilizer and the temperature and time used to process correctly.

- ☐ steam sterilizer by Statium
- ☐ Midmark steam sterilizer
- ☐ chemical vapor sterilizer (courtesy of Barnstead/Thermolyne Harvey Chemiclave)
- ☐ dry heat sterilizer

True or false:

- _____ Steam sterilizers do not need to have biological testing done.
- _____ The most rapid sterilization is done in an ethylene oxide sterilization system.
- _____ Liquid chemical sterilization is very easily monitored.
- _____ Ventilation is required for chemical vapor sterilization.

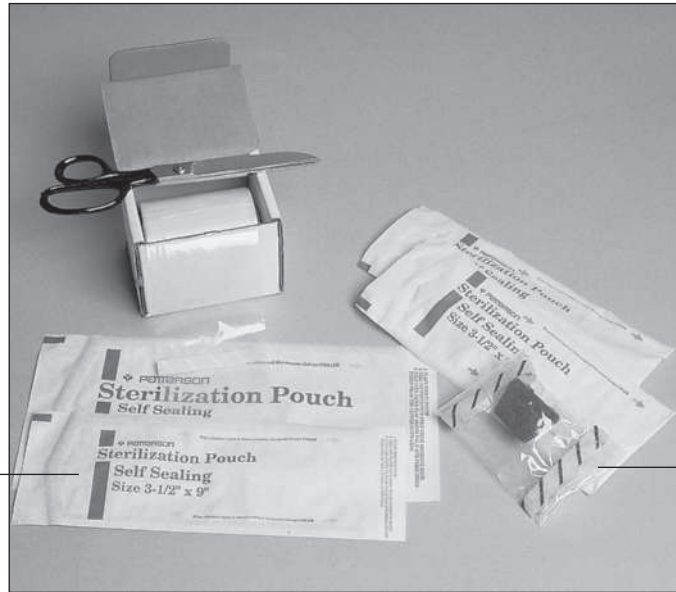


Biological Monitors, Process Indicators, and Dosage Indicators

Label the photos.

Mix and match:

- | | |
|--|--------------------------|
| 1. _____ offer the most accurate way to assess whether sterilization has occurred | A. process indicators |
| 2. _____ indicate that correct conditions were present for sterilization to take place | B. dosage indicators |
| 3. _____ indicate whether the packages have been exposed to heat but not whether sterilization has taken place | C. biological indicators |



National Fire Protection Association's Color and Number System

Using the four colors of red, yellow, blue, and white that have been developed by the National Fire Protection Association's color and number method, color the labels on the bottles appropriately.

Fill in the numbering on the labels as follows:

Distilled water

Fire Hazard 0 = Noncombustible

Health Hazard 0 = No unusual hazard

Reactivity 0 = Stable: Nonreactive when mixed with water

PPE = (no number noted)

Sodium hypochlorite

Fire Hazard 0 = Noncombustible

Health Hazard 2 = Warning: Harmful if inhaled

Reactivity 0 = Stable: Nonreactive when mixed with water

PPE = (no number noted)

Acetone

Fire Hazard 3 = Warning: Flammable liquid

Health Hazard 1 = Caution: May cause irritation

Reactivity 0 = Stable: Nonreactive when mixed with water

PPE = (no number noted)

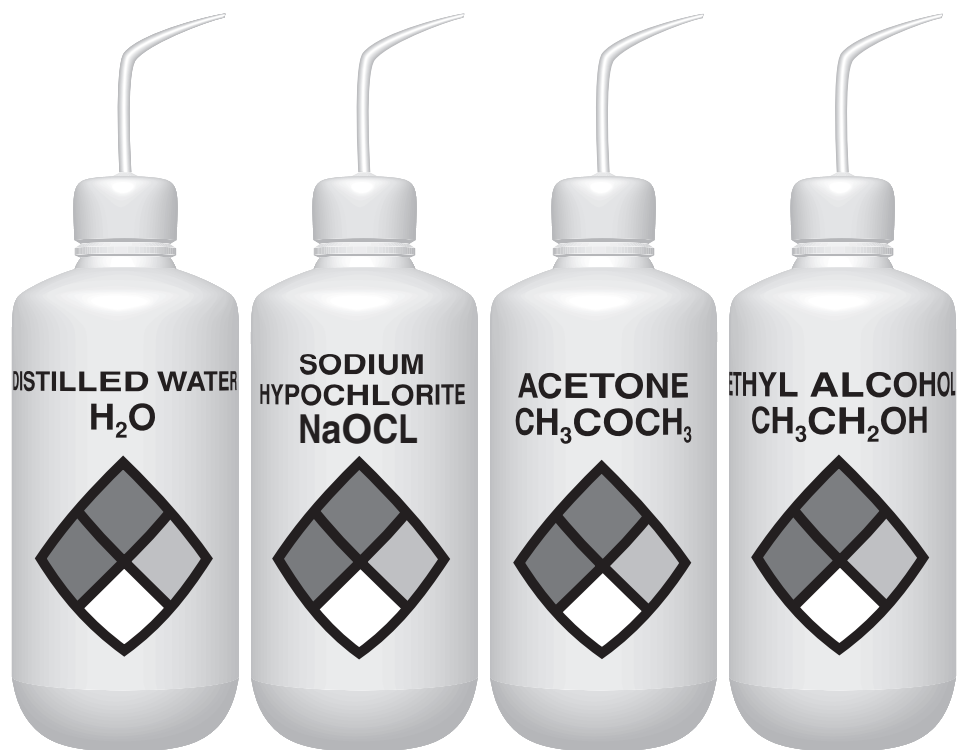
Ethyl Alcohol

Fire Hazard 3 = Warning: Flammable liquid

Health Hazard 0 = No unusual hazard

Reactivity 0 = Stable: Nonreactive when mixed with water

PPE = (no number noted)



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Answer Key

Chapter 1: General Anatomy

Basic Cell Structures

Refer to Figure 6-3 in *Dental Assisting: A Comprehensive Approach 3e*

1. C 2. D 3. A 4. B

Body Planes

Refer to Figure 6-1A in *Dental Assisting: A Comprehensive Approach 3e*

Body Directions

Refer to Figure 6-1B in *Dental Assisting: A Comprehensive Approach 3e*

Body Cavities

Refer to Figure 6-2 in *Dental Assisting: A Comprehensive Approach 3e*

The body cavities are divided into two sections: dorsal and ventral.

The structures in the thoracic cavity include: lungs, heart, and all accessory parts needed for their functioning.

The structures in the abdominal cavity include: digestive tract and supporting organs.

The structures in the pelvic cavity include: urinary bladder, rectum, and reproductive system.

Axial and Appendicular Skeleton

Refer to Figure 6-4 in *Dental Assisting: A Comprehensive Approach 3e*

The axial skeleton includes the skull, spinal column, ribs, and sternum.

The appendicular skeleton includes the upper and lower extremities.

The hands and feet are a part of the appendicular skeleton.

Anatomic Features of Bone

Refer to Figure 6-5 in *Dental Assisting: A Comprehensive Approach 3e*

Spongy bone is also called cancellous bone.

Skeletal Joints

Refer to Figure 6-6 in *Dental Assisting: A Comprehensive Approach 3e*

Another name for joints is articulations.

The temporomandibular joint is a synovial joint.

Types of Muscle Tissue

Refer to Figure 6-7 in *Dental Assisting: A Comprehensive Approach 3e*

1. B
2. C
3. A

Tendons and Ligaments

Refer to Figure 6-8 in *Dental Assisting: A Comprehensive Approach 3e*

Tendons attach muscle to bones.

Ligaments attach or connect bone to bone.

Structure of a Neuron

Refer to Figure 6-9 in *Dental Assisting: A Comprehensive Approach 3e*

Axons conduct impulses away from the nerve cell.

Dendrites conduct impulses toward the nerve cell.

Simple Reflex Arc

Refer to Figure 6-10 in *Dental Assisting: A Comprehensive Approach 3e*

A. Connecting neurons are located in the gray matter.

1. D
2. B
3. A
4. C

Structures of the Endocrine System

Refer to Figure 6-11 in *Dental Assisting: A Comprehensive Approach 3e*

1. C 2. A 3. B 4. D

Systemic and Pulmonary Circulation

Refer to Figure 6-12 in *Dental Assisting: A Comprehensive Approach 3e*

1. B 2. A

Structures of the Heart

Refer to Figure 6-13 in *Dental Assisting: A Comprehensive Approach 3e*

1. B 2. C

Structures of the Digestive System

Refer to Figure 6-14 in *Dental Assisting: A Comprehensive Approach 3e*

1. C 2. D 3. B 4. A

Salivary Glands and Ducts

Refer to Figure 6-14B in *Dental Assisting: A Comprehensive Approach 3e*

The sublingual gland empties directly into the mouth. This gland resembles a tube or hose that lies under the tongue. There are small openings all along this tube for saliva to enter the mouth.

Structures of the Respiratory System

Refer to Figure 6-15 in *Dental Assisting: A Comprehensive Approach 3e*

Bronchial tree is made up of:

- Trachea
- Lung
- Bronchus

Larynx = voice box

Trachea = windpipe

Epiglottis covers the larynx

Structures of the Bronchi

Refer to Figure 6-15 in *Dental Assisting: A Comprehensive Approach 3e*

Gaseous exchange takes place in the alveoli.

Bronchioles are smaller than the bronchi.

The Lungs

Refer to Figure 6-19 in *Dental Assisting: A Comprehensive Approach 3e*

The lungs lie between the sternum and thoracic vertebrae.

Tonsils

Refer to Figure 6-16 in *Dental Assisting: A Comprehensive Approach 3e*

1. B
2. C
3. A

The Immune System

Refer to Figure 6-17 in *Dental Assisting: A Comprehensive Approach 3e*

1. Spleen
2. Lymph nodes

Chapter 2: Head and Neck Anatomy

Landmarks of the Face

Refer to Figure 7-1 in *Dental Assisting: A Comprehensive Approach 3e*

1. D
2. B
3. A
4. C

Structures of the Oral Cavity—Maxillary View

Refer to Figure 7-2A in *Dental Assisting: A Comprehensive Approach 3e*

1. D. Vestibule fornix
2. Order of tissues starting with the tooth: gingiva, alveolar mucosa, vestibule, and then vestibule fornix
3. Maxillary central incisors

Structures of the Oral Cavity–Mandibular View

Refer to Figure 7-2B in *Dental Assisting: A Comprehensive Approach 3e*

1. A
2. C

Landmarks on the Buccal Mucosa

Refer to Figure 7-3 in *Dental Assisting: A Comprehensive Approach 3e*

1. The linea alba is a raised white tissue found on the buccal mucosa usually reflecting the line of occlusion.
2. “Fordyce’s spots” are small glands near the commissures. They are yellowish in color.

Landmarks of the Oral Pharynx Area

Refer to Figure 7-4B in *Dental Assisting: A Comprehensive Approach 3e*

1. B
2. C
3. A

Posterior tonsillar pillars are also called palatopharyngeal arches.

Landmarks of the Palate

Refer to Figure 7-4 in *Dental Assisting: A Comprehensive Approach 3e*

1. Palatine raphe
2. Incisive papilla
3. Palatine rugae

Landmarks on the Dorsal Surface of the Tongue

Refer to Figure 7-5A in *Dental Assisting: A Comprehensive Approach 3e*

Median sulcus

1. B
2. D
3. C
4. A

Landmarks on the Ventral Surface of the Tongue

Refer to Figure 7-5B in *Dental Assisting: A Comprehensive Approach 3e*

- C. excess bone formations on the lingual side of the alveolar bone

Basic Taste Buds of the Tongue

Refer to Figure 7-6 in *Dental Assisting: A Comprehensive Approach 3e*

1. Taste buds are stimulated with different chemicals.
2. A
3. The brain

Salivary Glands and Ducts

Refer to Figure 7-7 in *Dental Assisting: A Comprehensive Approach 3e*

1. Sublingual gland
2. Parotid gland
3. Wharton's duct

Lateral Aspect of the Cranium and Face

Refer to Figure 7-8A in *Dental Assisting: A Comprehensive Approach 3e*

Bones of the cranium: Frontal, parietal, occipital, temporal, sphenoid and ethmoid bones.

Bones of the face: nasal, vomer, lacrimal, maxilla, mandible and zygomatic.

1. B. The glenoid fossa is found on the temporal bone
2. A. The vomer

Frontal View of the Bones of the Cranium and Face

Refer to Figure 7-9 in *Dental Assisting: A Comprehensive Approach 3e*

1. C. In the center of the mandible near the border

Landmarks of the Palate

Refer to Figure 7-10 in *Dental Assisting: A Comprehensive Approach 3e*

There are seven foramina on the palate counting the lesser palatine foramina.

Lateral View of the External Surface of the Mandible

Refer to Figure 7-11A in *Dental Assisting: A Comprehensive Approach 3e*

Mix and match:

1. C 2. A 3. D 4. B

There are five foramina in the mandible.

Internal Lingual View of the Mandible

Refer to Figure 7-11B in *Dental Assisting: A Comprehensive Approach 3e*

List the lingual mandibular foramen: Mandibular foramen (2) and lingual foramen (1).

Name the bony raised area surrounding the lingual foramen: genial tubercles.

Another name for the mylohyoid groove is the internal oblique ridge.

Temporomandibular Joint (TMJ)

Refer to Figure 7-12 in *Dental Assisting: A Comprehensive Approach 3e*

B. The condyle is the part of the mandible that makes up the TMJ.

The articular disc (meniscus).

Movement of the Temporomandibular Joint (TMJ)–Hinge Joint

Refer to Figure 7-13A in *Dental Assisting: A Comprehensive Approach 3e*

Meniscus is another name for the articular disc.

The hinge motion occurs when the mandible opens and the condyle and the discs begin rotation anteriorly.

Movement of the Temporomandibular Joint (TMJ)–Gliding Joint

Refer to Figure 7-13B in *Dental Assisting: A Comprehensive Approach 3e*

The gliding motion occurs as the mandible continues to open. The upper and lower cavities of the joint are both involved.

Muscles of Mastication–Lateral View

Refer to Figure 7-14 in *Dental Assisting: A Comprehensive Approach 3e*

Muscles of mastication:

- Masseter
- Temporal
- Internal pterygoid
- External pterygoid

Mix and match:

1. B 2. D 3. A 4. C

Muscles of Facial Expression

Refer to Figure 7-15 in *Dental Assisting: A Comprehensive Approach 3e*

Muscles of facial expression:

- Buccinator muscle
- Mentalis muscle
- Orbicularis oris muscle
- Zygomatic major muscle

The orbicularis oris surrounds the mouth.

D. zygomatic major muscle

B. mentalis muscle

Extrinsic Muscles of the Tongue

Refer to Figure 7-16 in *Dental Assisting: A Comprehensive Approach 3e*

Genioglossus muscle

Hyoglossus muscle

Styloglossus

Palatoglossus

The genioglossus muscle lies across the floor of the mouth.

Muscles of the Floor of the Mouth

Refer to Figure 7-17 in *Dental Assisting: A Comprehensive Approach 3e*

Muscles on the floor of the mouth:

- Geniohyoid
- Mylohyoid
- A. Digastric–anterior belly B. Digastric–posterior belly
- Styloid

All of these muscles attach to the hyoid bone.

Mix and match:

1. C 2. D 3. A 4. B

The Hyoid Bone

Refer to Figure 7-17B in *Dental Assisting: A Comprehensive Approach 3e*

Fill in answers: mandible vertebrae. or muscles.

Parts of the hyoid bone: greater cornu, lesser cornu, and the body of the hyoid bone.

Muscle groups that are attached to the hyoid bone.

E. muscles of the tongue and muscles on the floor of the mouth.

Muscles of the Soft Palate

Refer to Figure 7-18 in *Dental Assisting: A Comprehensive Approach 3e*

The function of the two muscles of the soft palate is to raise the soft palate during the swallowing process.

C. the palatoglossus muscles are also a part of the muscles of the tongue.

Muscles of the Neck

Refer to Figure 7-19 in *Dental Assisting: A Comprehensive Approach 3e*

Muscles of the neck:

- Platysma
- Sternocleidomastoid
- Trapezius

Mix and match:

1. B 2. A 3. C

The insertion point of each of the muscles of the neck:

- Platysma—inferior border of the mandible
- Sternocleidomastoid—mastoid process anterior part of the occipital bone
- Trapezius—clavicle and shoulders

Nerves of the Maxillary Arch

Refer to Figure 7-20 in *Dental Assisting: A Comprehensive Approach 3e*

1. Posterior superior alveolar nerve
2. Middle superior alveolar nerve
3. Anterior superior alveolar nerve

Mix and match:

1. A 2. C 3. D 4. B

Medial View of the Branches of the Pterygopalatine Nerve

Refer to Figure 7-20B in *Dental Assisting: A Comprehensive Approach 3e*

Branches of the pterygopalatine nerve:

- Greater palatine nerve
- Lesser palatine nerve
- Nasopalatine nerve

Mandibular Nerves

Refer to Figure 7-21 in *Dental Assisting: A Comprehensive Approach 3e*

Three branches of the mandibular nerve:

- Buccal
- Lingual
- Inferior alveolar

Three branches of the inferior alveolar nerve:

- Incisive nerve
- Mental nerve
- Mylohyoid nerve

1. A 2. C 3. A

Arteries of the Face and Oral Cavity

Refer to Figure 7-22 in *Dental Assisting: A Comprehensive Approach 3e*

1. B 2. B

List branches of the external carotid artery:

- Facial artery
- Lingual artery
- Mandibular artery
- Maxillary artery
- Pterygoid artery

List the branches of the mandibular artery:

- Dental arteries
- Incisive arteries
- Inferior alveolar artery
- Mental artery
- Mylohyoid artery

Mix and match:

1. C 2. B 3. D 4. E 5. A

Veins of the Face and Oral Cavity

Refer to Figure 7-23 in *Dental Assisting: A Comprehensive Approach 3e*

1. internal jugular vein
2. superficial veins and deep veins

Superficial veins are: facial, deep facial, retromandibular and lingual.

Deep veins are: maxillary vein and pterygoid plexus of veins.

Chapter 3: Tooth and Tissue Structures

The Three Primary Embryonic Layers

Refer to Figure 8-1 in *Dental Assisting: A Comprehensive Approach 3e*

1. B
2. C
3. A

Embryology

Refer to Figure Table 8-1 in *Dental Assisting: A Comprehensive Approach 3e*

1. Embryonic or germinal stage
2. Zygote phase
3. Embryonic stage
4. Week 4
5. Fetal stage
6. Week 12

Developing Embryo with Primary Layers Identified

Refer to Figure 8-2 in *Dental Assisting: A Comprehensive Approach 3e*

1. Skin, brain, nervous system, hair and nails, enamel of teeth, lining of the oral cavity
2. Epithelial linings, glandular organs, digestive system
3. Bones, muscles, circulatory system, internal organs, reproductive system, lining of the abdominal cavity, dentin, cementum, pulp of the teeth

Facial Processes Shown on an Embryo (Child and Adult)

Refer to Figure 8-3 in *Dental Assisting: A Comprehensive Approach 3e*

Development of the Palate

Refer to Figure 8-4 in *Dental Assisting: A Comprehensive Approach 3e*

1. The primary palate serves to separate the developing oral cavities from the nasal cavities.
2. The secondary palate contains 6 teeth in each quadrant or 24 teeth total.

Bilateral Cleft of the Lip (Alveolar Process and Primary Palate)

Refer to Figure 8-10 in *Dental Assisting: A Comprehensive Approach 3e*

1. How many cleft lips occur in 1,000 live births? One
2. Cleft lips are more common in boys or girls? Boys
3. How many cleft palates occur? 1 in every 2,500 births
4. Cleft palates occurring alone are more common in boys or girls? Girls

Life Cycle of the Tooth

Refer to Table 8-2 in *Dental Assisting: A Comprehensive Approach 3e*

Enamel Rods

Refer to Figure 8-13 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. B

Tissues of the Tooth

Refer to Figure 8-12 in *Dental Assisting: A Comprehensive Approach 3e*

1. B
2. C
3. D
4. A

Enamel

Refer to Figure 8-14 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. D
3. B
4. A

Dentin

Refer to Figure 8-14 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. A
3. D
4. B

Pulp

Refer to Figure 8-14 in *Dental Assisting: A Comprehensive Approach 3e*

1. Pulpitis
2. Fibroblasts
3. Intercellular substances

Cementum

Refer to Figure 8-14 in *Dental Assisting: A Comprehensive Approach 3e*

1. T
2. T
3. T
4. F
5. T

Tooth and Surrounding Tissues

Refer to Figure 8-14 in *Dental Assisting: A Comprehensive Approach 3e*

1. Calcified masses of dentin found in pulp tissue, they are quite common

Sharpey's Fibers and Cementum

Refer to Figure 8-15 in *Dental Assisting: A Comprehensive Approach 3e*

Collagen fibers from the periodontal ligament called Sharpey's fibers anchor the tooth to the alveolar bone.

Marginal gingival

Periodontal Ligaments and Alveolar Crests

Refer to Figure 8-16 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. A
3. B

Cross-section of Mandibular Molar Tissues of the Tooth Identified

Refer to Figure 8-16 in *Dental Assisting: A Comprehensive Approach 3e*

1. Resist forces that try to pull the tooth outward and resists rotational forces
2. Resist intrusive forces that try to push the tooth inward

3. Function much like the alveolar crest; bigger group but different area
4. Only in multi-rooted teeth, they resist rotational forces and hold the teeth in interproximal contact
5. To resist rotational forces and hold teeth in interproximal contact
6. Resist rotational forces and tilting

Gingival Fiber Groups

Refer to Figure 8-17 in *Dental Assisting: A Comprehensive Approach 3e*

1. In the lamina propria
2. Aid in attaching the gingiva to the alveolar bone
3. Circle and tighten the gingival margin around the neck of the tooth
4. Support fibers that anchor the tooth to the bone
5. Support fibers that anchor the tooth to the bone

Periodontium

Refer to Figure 8-18 in *Dental Assisting: A Comprehensive Approach 3e*

Interdental gingiva or interdental papilla.

Interdental gingiva, gingival sulcus, epithelial attachment.

Marginal gingiva.

Alveolar Mucosa

Refer to Figure 8-19 in *Dental Assisting: A Comprehensive Approach 3e*

1. Attached gingiva
2. Interdental gingiva/interdental papilla
3. Epithelial attachments
4. Mucogingival junction, alveolar mucosa
5. Gingival groove
6. Gingival sulcus

Chapter 4: Tooth Anatomy

Adult Dentition

Refer to Figure 9-2 and 9-4 in *Dental Assisting: A Comprehensive Approach 3e*

Deciduous Dentition

Refer to Figure 9-4 in *Dental Assisting: A Comprehensive Approach 3e*

1. C 2. I 3. D 4. A 5. E
6. B 7. J 8. F 9. H 10. G

Primary Dentition

Refer to Figure 9-2 in *Dental Assisting: A Comprehensive Approach 3e*

Permanent Dentition

Refer to Figure 9-2 in *Dental Assisting: A Comprehensive Approach 3e*

Primary Teeth

Refer to Figure 9-4 in *Dental Assisting: A Comprehensive Approach 3e*

Permanent Dentition

Refer to Figure 9-3 in *Dental Assisting: A Comprehensive Approach 3e*

Permanent Dentition

Refer to Figure 9-8 in *Dental Assisting: A Comprehensive Approach 3e*

Permanent Dentition

Refer to Figure 9-8 in *Dental Assisting: A Comprehensive Approach 3e*

Permanent Dentition

Refer to Figure 9-8 in *Dental Assisting: A Comprehensive Approach 3e*

1. E 2. A 3. F 4. B
5. C 6. H 7. G 8. D

Anatomical Structures

Refer to Figure 9-28 in *Dental Assisting: A Comprehensive Approach 3e*

Anatomical Landmarks

Refer to Figure 9-17, 9-21, 9-23, 9-25 in *Dental Assisting: A Comprehensive Approach 3e*

Anatomical Landmarks

Refer to Figure 9-12 in *Dental Assisting: A Comprehensive Approach 3e*

Match the structure to the definition. Label and color the structure on the illustration.

1. B 2. A 3. F 4. E 5. C 6. D

Maxillary Central Incisors

Refer to Figure 9-32 in *Dental Assisting: A Comprehensive Approach 3e*

Has imbrication lines

First tooth from the midline

Play an important part in appearance

Longest crown in maxillary arch

Play an important part in speech

Used for cutting food

Mesial surface is longer than the distal surface

When erupted it has mamelons

Root inclines to the distal slightly

Labial surface convex

Has a cingulum

Root is 1½ the size of the crown

One root

Blunt apex

Mesial angle acute

Maxillary Lateral Incisors

Refer to Figure 9-34 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. B
3. A

Maxillary Canine

Refer to Figure 9-35 in *Dental Assisting: A Comprehensive Approach 3e*

1. Cornerstone of the mouth
2. Tear the food
3. Longest

Maxillary First Bicuspid (Premolar)

Refer to Figure 9-36 in *Dental Assisting: A Comprehensive Approach 3e*

Cusps come together on the occlusal surface in a central groove

It is bifurcated

Posterior tooth

Function is to pulverize food

Removed for ortho sometimes

Buccal cusp is longer than the lingual

Maxillary Second Bicuspid (Premolar)

Refer to Figure 9-37 in *Dental Assisting: A Comprehensive Approach 3e*

1. False
2. False
3. False
4. True
5. False

Maxillary First Molar

Refer to Figure 9-38 in *Dental Assisting: A Comprehensive Approach 3e*

1. _____ single root ☒ bifurcated _____ trifurcated
2. ☒ erupts 6 yrs of age _____ erupts 12 years of age _____ erupts 18 years of age
3. _____ tear _____ pulverize ☒ chew
4. _____ 3 cusps _____ 4 cusps ☒ 5 cusps
5. ☒ cusp of Carabelli _____ no cusp of Carabelli
6. _____ roots together ☒ roots spread apart

Maxillary Second Molar

Refer to Figure 9-39 in *Dental Assisting: A Comprehensive Approach 3e*

1. 4
2. 3
3. Smaller
4. 12
5. Millstone

Maxillary Third Molar

Refer to Figure 9-40 in *Dental Assisting: A Comprehensive Approach 3e*

1. 17–21 years
2. Wisdom, because it was thought that by the time these teeth erupted into the oral cavity a person would have obtained maturity or wisdom
3. No
4. Supplemental
5. Removed

Mandibular Central Incisors

Refer to Figure 9-41 in *Dental Assisting: A Comprehensive Approach 3e*

1. Mandibular
2. Mandibular

3. Mandibular
4. Both
5. Both

Mandibular Lateral Incisors

Refer to Figure 9-42 in *Dental Assisting: A Comprehensive Approach 3e*

1. True
2. True
3. False
4. False

Mandibular Cuspids

Refer to Figure 9-43 in *Dental Assisting: A Comprehensive Approach 3e*

Third tooth from the midline

Not as well-developed as the maxillary canine

Longest tooth in the mandibular arch

One canal in the root

Cornerstone for the mandibular arch

Mandibular First Bicuspid (Premolars)

Refer to Figure 9-44 in *Dental Assisting: A Comprehensive Approach 3e*

Mandibular Second Bicuspid (Premolars)

Refer to Figure 9-45 in *Dental Assisting: A Comprehensive Approach 3e*

1. B
2. C
3. A
4. D

Mandibular First Molar

Refer to Figure 9-46 in *Dental Assisting: A Comprehensive Approach 3e*

Label and color the mandibular first molars.

Color a red box around each item that refers to mandibular first molar: bifurcated, no cusps of Carabelli.

Color a blue box around each item that refers to maxillary first molar: trifurcated, cusp of Carabelli.

Color a green box around each item that refers to both maxillary and mandibular first molars: erupts 6 years of age, chew, 5 cusps, roots spread apart, buccal groove, lingual groove.

Mandibular Second Molar

Refer to Figure 9-47 in *Dental Assisting: A Comprehensive Approach 3e*

Mix and match:

mandibular first molar	_____	bifurcated and spread apart the most
mandibular first molar	_____	bifurcated and roots closer together
mandibular second molar	_____	may have many roots
mandibular second molar	_____	6 year molar
mandibular third molar	_____	12 year molar
mandibular third molar	_____	wisdom tooth

Mandibular Third Molar

Refer to Figure 9-48 in *Dental Assisting: A Comprehensive Approach 3e*

1. Wisdom teeth
2. Distal
3. Horizontal

Mixed Dentition of a Seven- or Eight-Year-Old

Refer to Figure 9-5 in *Dental Assisting: A Comprehensive Approach 3e*

Contact and Embrasure

Refer to Figure 9-11 in *Dental Assisting: A Comprehensive Approach 3e*

Deciduous Maxillary Teeth

Refer to Figure 9-1 in *Dental Assisting: A Comprehensive Approach 3e*

Deciduous Mandibular Teeth

Refer to Figure 9-1 in *Dental Assisting: A Comprehensive Approach 3e*

1. E 2. B 3. C 4. A 5. D

Identification of Teeth

Refer to Figure 9-1 in *Dental Assisting: A Comprehensive Approach 3e*

Eruption Dates for Primary Teeth

1. Emerges into the oral cavity
2. Maxillary and mandibular first molar
3. Maxillary and mandibular central incisor
4. Maxillary second molar
5. Maxillary lateral incisor
6. Maxillary and mandibular Canine

Exfoliation Dates for Primary Teeth

1. Shed from the oral cavity
2. Maxillary and mandibular central incisor
3. Maxillary canine/maxillary and mandibular second molar
4. Maxillary and mandibular first molar
5. Maxillary and mandibular lateral incisor

Chapter 5: Dental Charting

Universal Numbering System

Refer to Figure 14-1 and 14-2 in *Dental Assisting: A Comprehensive Approach 3e*

 #3 maxillary right first molar

 #20 mandibular left second bicuspid (premolar)

#10 maxillary left lateral incisor

 #6 maxillary right cuspid

 #32 mandibular right third molar

International Standards of Organization Numbering System

Refer to Figure 14-3 and 14-4 in *Dental Assisting: A Comprehensive Approach 3e*

 C. maxillary right third molar

A. tooth #25

 B. mandibular left central incisor

B. tooth #31

 D. mandibular right central incisor

C. tooth #18

 A. maxillary left second bicuspid (premolar)

D. tooth #41

Palmer Numbering System

Refer to Figure 14-5 and 14-6 in *Dental Assisting: A Comprehensive Approach 3e*

 3| maxillary right cuspid

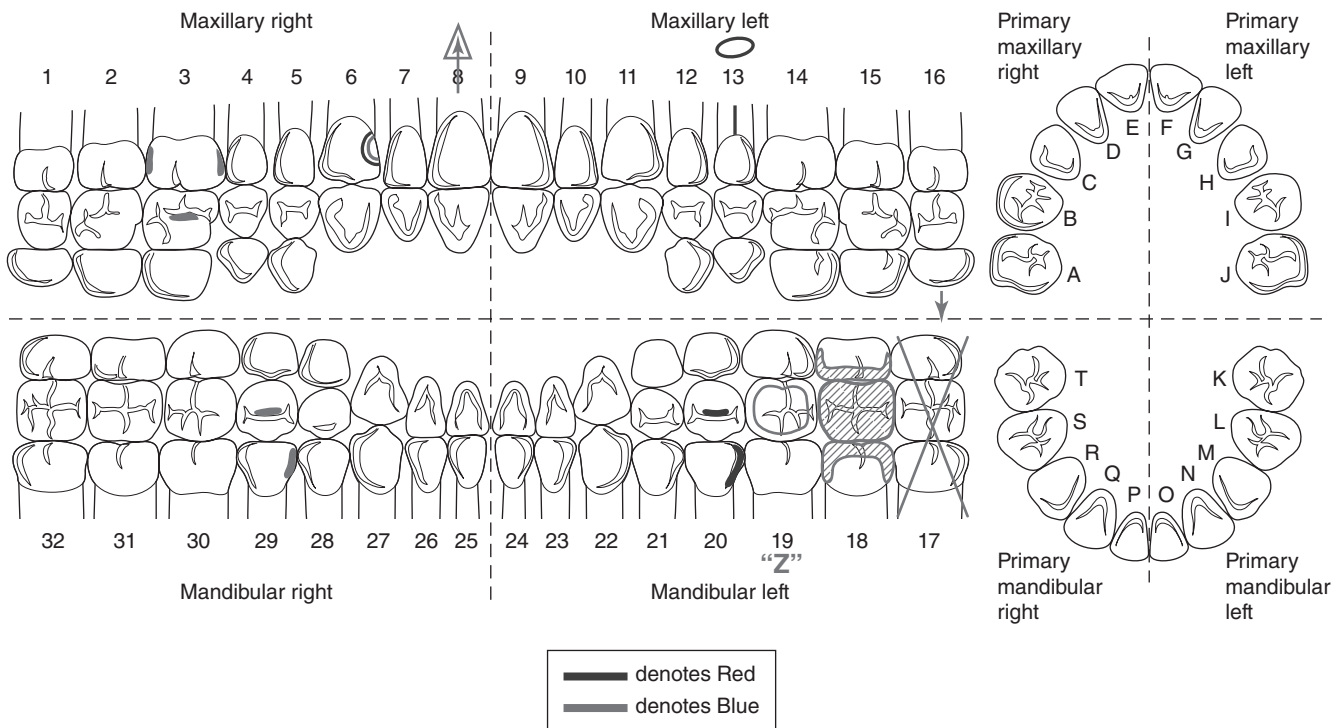
 6| mandibular right first molar

 2| maxillary left lateral incisor

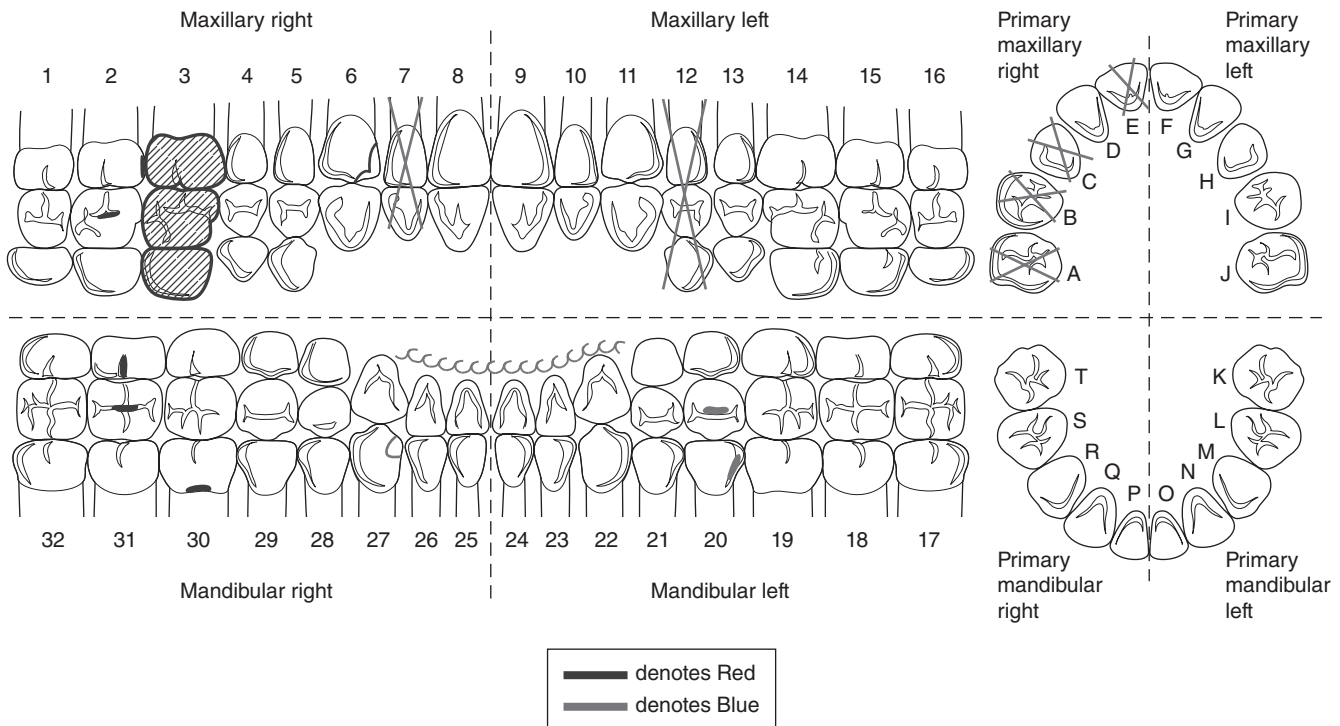
 7| maxillary left second molar

 4| mandibular left first bicuspid (premolar)

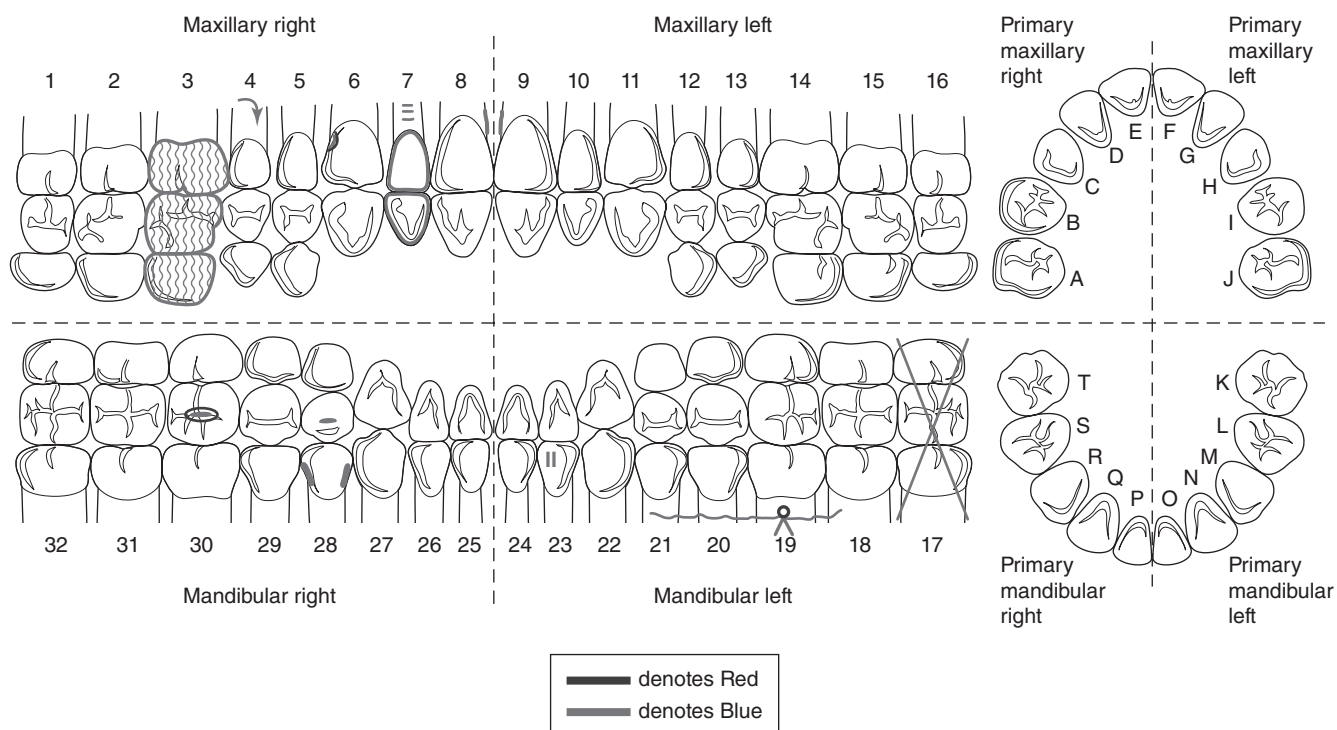
Charting Example #1



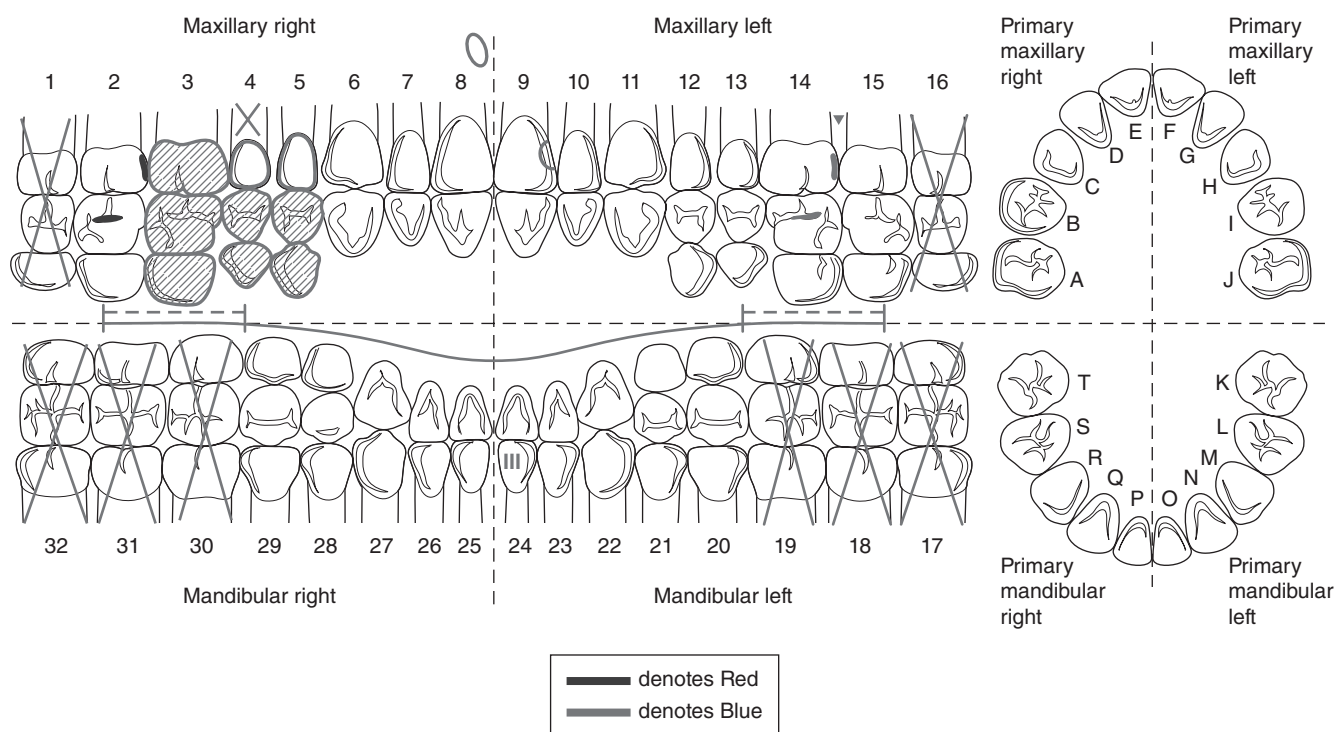
Charting Example #2



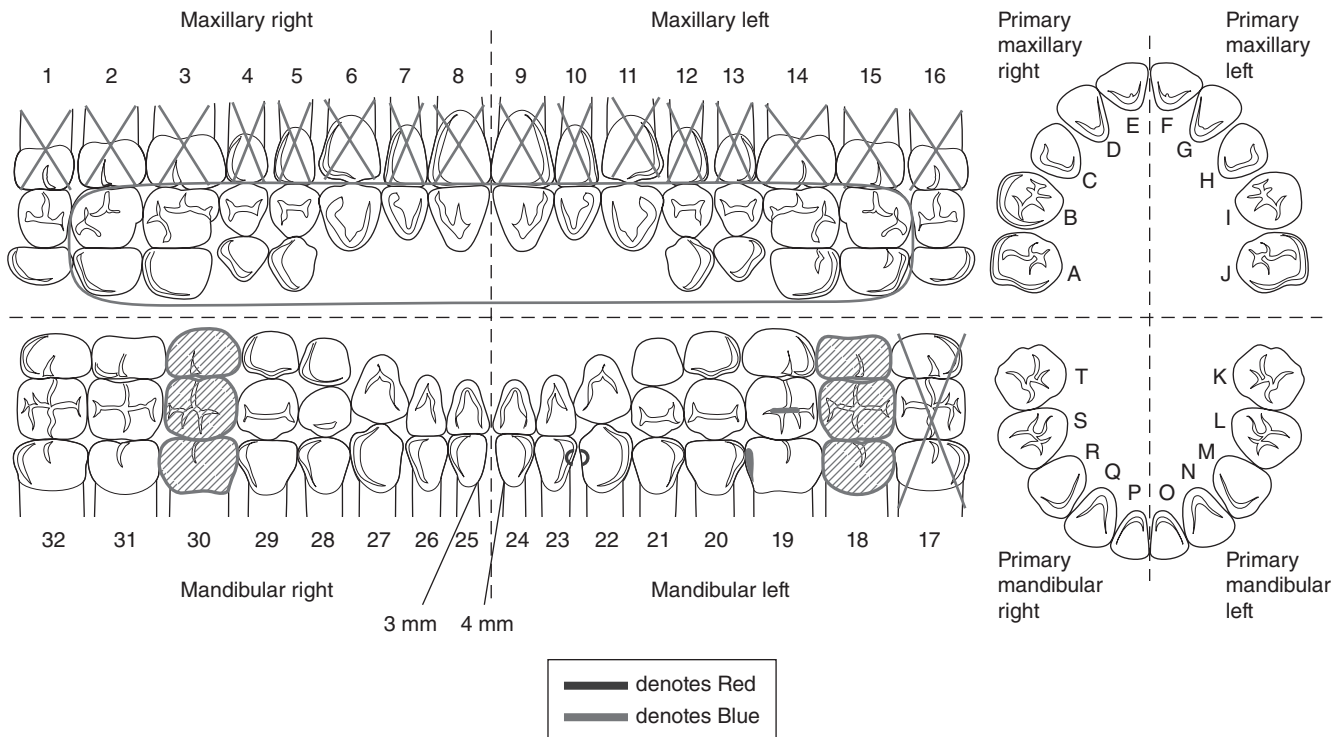
Charting Example #3



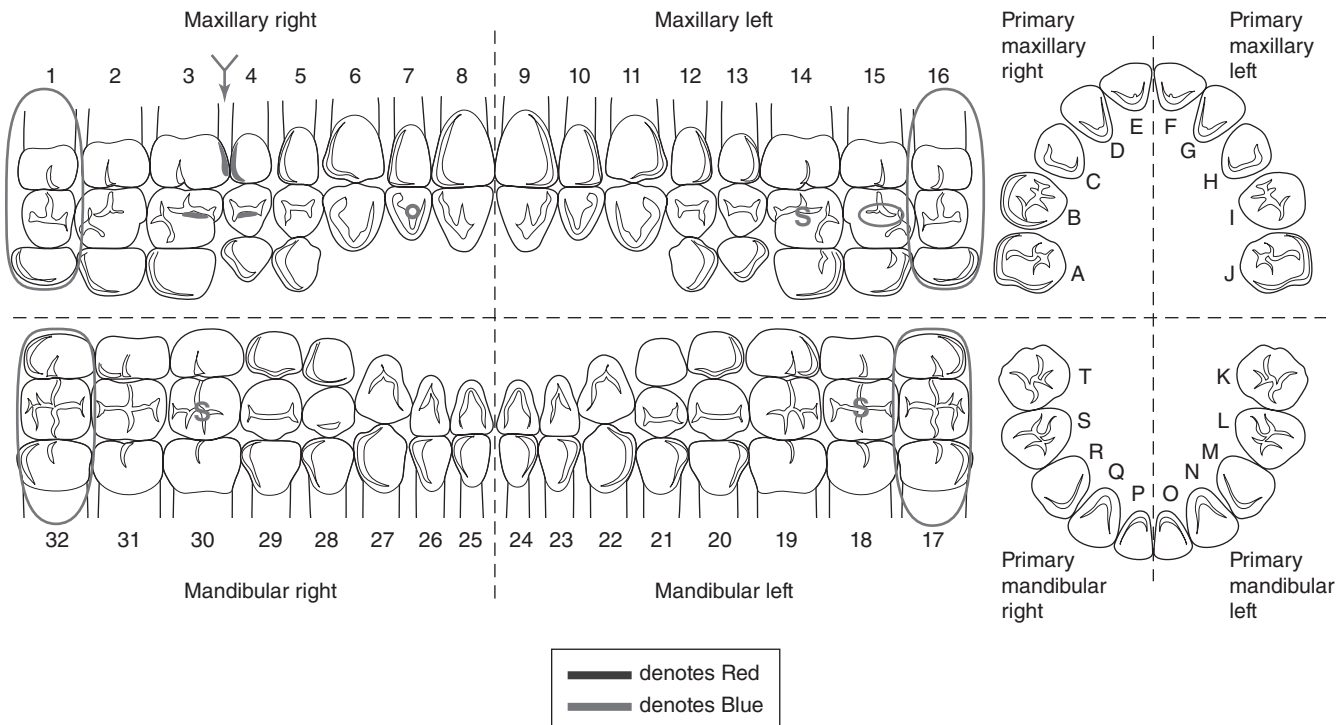
Charting Example #4



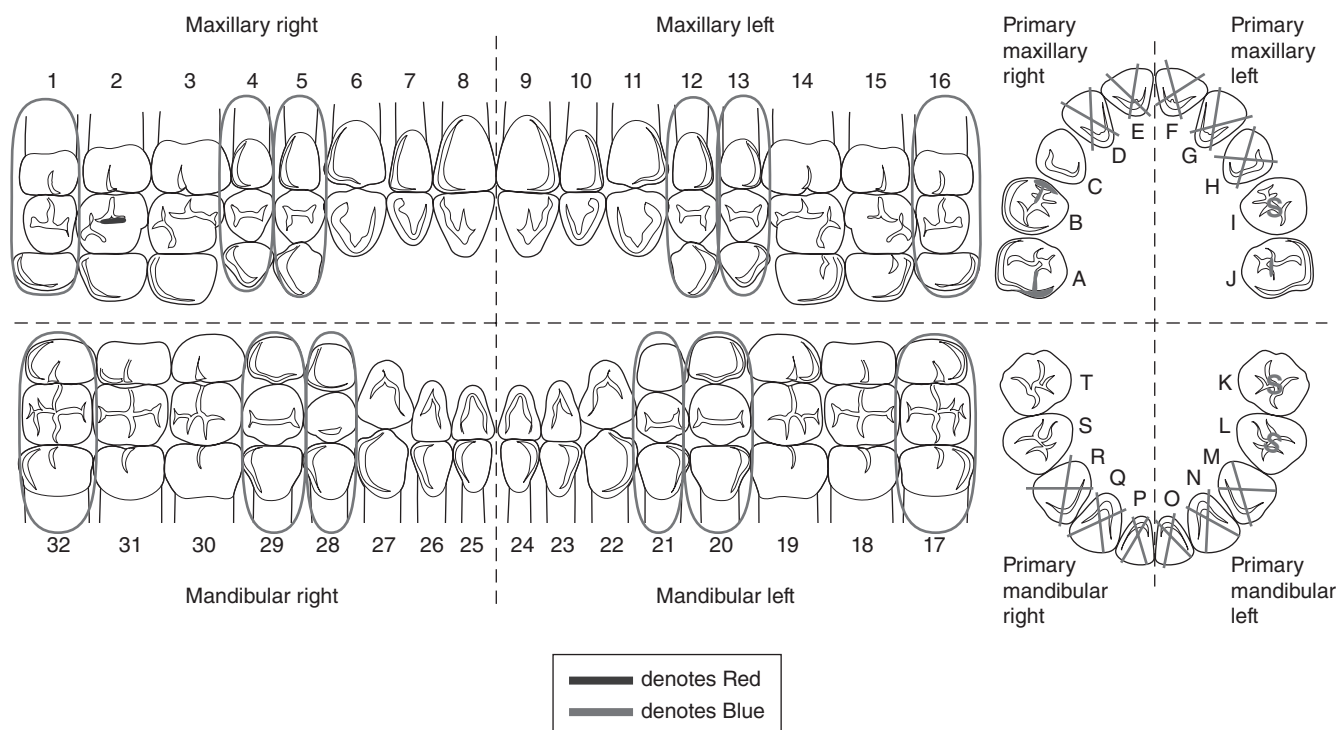
Charting Example #5



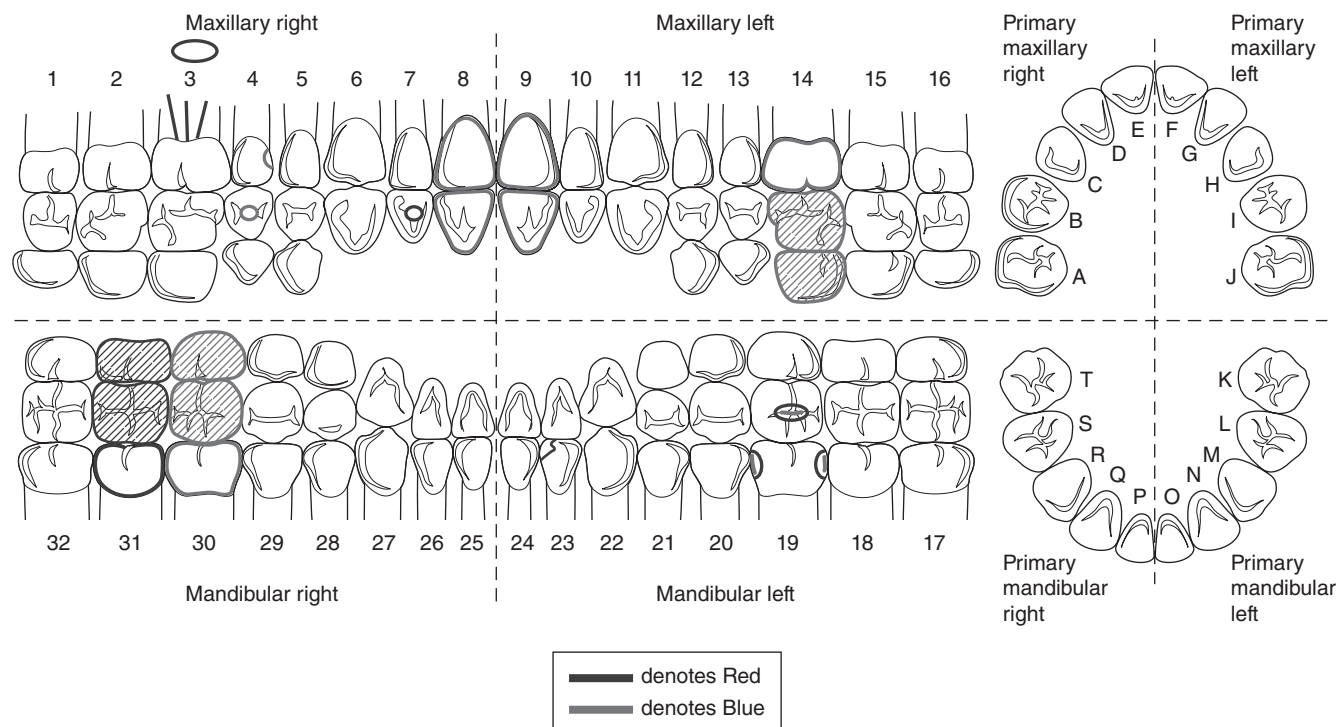
Charting Example #6



Charting Example #7



Charting Example #8



Chapter 6: Introduction to the Dental Office and Basic Chairside Assisting

Small Dental Office Blueprint

Refer to Figure 17-1 in *Dental Assisting: A Comprehensive Approach 3e*

1. There are three treatment rooms.

Type of equipment found in the treatment rooms: curing light, amalgamator, x-ray view box, communication system, and computer.

Mix and match:

1. D
2. E
3. B
4. C
5. A

Sterilization Area

Refer to Figure 17-5 in *Dental Assisting: A Comprehensive Approach 3e*

Items found in sterilizing area:

- Sink
- Countertop space
- Ultrasonic unit
- Sterilizing units
- Storage
- Handpiece cleaning unit

Laboratory Area

Refer to Figure 17-6 in *Dental Assisting: A Comprehensive Approach 3e*

1. Dental lathe or a laboratory handpiece
2. Vibrator and model trimmer
3. Four other items found in the dental lab include: rubber bowls and spatulas, laboratory handpiece, plaster/stone storage bins, and heat source and exhaust fan

Dental Treatment Room

Refer to Figure 17-9 in *Dental Assisting: A Comprehensive Approach 3e*

Procedure trays are stored behind the patient chair, above the cabinet countertop.

Operator's Mobile Cart

Refer to Figure 17-16 in *Dental Assisting: A Comprehensive Approach 3e*

Mix and match:

1. C 2. A 3. D 4. B

Air-water Syringe

Refer to Figure 17-17 in *Dental Assisting: A Comprehensive Approach 3e*

The functions of the air-water syringe include providing air, providing water, or providing a combination of air and water spray. This helps to keep the oral cavity clean and dry during procedures.

1. Only the air-water syringe tips can be sterilized
2. Yes, the tips are removable
3. Yes, disposable tips are available
4. The air-water syringe is flushed with water between patients and at the beginning of the day

Activity Zones

Refer to Figure 17-28 in *Dental Assisting: A Comprehensive Approach 3e*

1. D. all of the above
2. D. —static zone
3. A. —right-handed operator

Chapter 7: Basic Chairside Instruments and Tray Systems

Parts of an Instrument and Different Shanks

Refer to Figure 19-1 and 19-4 in *Dental Assisting: A Comprehensive Approach 3e*

1. straight
2. curved
3. monangle
4. binangle

5. triple angle

1. Posterior areas of the mouth
2. Anterior areas of the mouth

Instruments with Black's Three-Number Formula

Refer to Figure 19-6 in *Dental Assisting: A Comprehensive Approach 3e*

1. First number is the width of the blade in tenths of a millimeter
2. Second number is the length of the blade in millimeters
3. Third number is the angle of the blade to the long axis of the handle, in degrees centigrade

Three number instruments: chisels, hatchets, and hoes.

Instruments with Black's Four-Number Formula

Refer to Figure 19-7 in *Dental Assisting: A Comprehensive Approach 3e*

1. First number is the width of the blade in tenths of a millimeter
2. Second number is the degree of the angle from the cutting edge of the blade to the handle of the instrument
3. Third number is the length of the blade in millimeters
4. Fourth number is the angle of the blade to the long axis of the handle, in degrees Centigrade

Four number instruments: gingival margin trimmers and angle formers.

Chisels, Hatchets, and Hoes

Refer to Figure 19-9, 19-11, and 19-10 in *Dental Assisting: A Comprehensive Approach 3e*

Chisels: straight, Wedelstaedt, and binangle.

1. Cutting instruments
2. Hatchets
3. Wedelstaedt
4. A. beveled edge

Gingival Margin Trimmers and Angle Formers

Refer to Figure 19-13 and 19-12 in *Dental Assisting: A Comprehensive Approach 3e*

1. C. four-number instrument in Black's formula
2. The second number
3. Distal

Excavators

Refer to Figure 19-14 in *Dental Assisting: A Comprehensive Approach 3e*

1. Spoon excavators
2. Blade and spoon excavators
3. B. remove carious debris from the tooth

Explorers, Periodontal Probe, and Cotton Pliers

Refer to Figure 19-16, 19-17, and 19-18 in *Dental Assisting: A Comprehensive Approach 3e*

1. Locking pliers
2. Expro

Cement Spatulas and Burnishers

Refer to Figure 19-23 and 19-26 in *Dental Assisting: A Comprehensive Approach 3e*

Burnishers are used to:

- D. smooth margins on restorations and smooth metal matrix bands

Condensors, Carvers, and Plastic Filling Instruments

Refer to Figure 19-19, 19-21, and 19-22 in *Dental Assisting: A Comprehensive Approach 3e*

Mix and match:

1. D 2. A 3. B 4. C

Parts of a Bur and Shanks

Refer to Figure 19-29 in *Dental Assisting: A Comprehensive Approach 3e*

Three types of shanks:

Straight

Latch-type

Friction grip

Friction grip shank is used with a high speed handpiece.

Straight shank is used with a slow speed handpiece without an attachment.

Cutting Bur Shapes and Number Ranges

Refer to Figure 19-30 in *Dental Assisting: A Comprehensive Approach 3e*

List the cutting burs:

Round Plain tapered fissure

Inverted cone Plain fissure straight

Crosscut fissure straight Crosscut fissure tapered

End cutting Wheel

Pear

Mix and match:

1. C 2. E 3. D 4. A 5. B

Mix and match:

1. B 2. A 3. D 4. C

Diamond Burs, Finishing Burs, Surgical Burs, and Laboratory Burs

Refer to Figure 19-31, 19-32, 19-33, and 19-34 in *Dental Assisting: A Comprehensive Approach 3e*

1. B 2. C
3. A. the diamond burs
D. the laboratory burs

High- and Low-speed Handpieces and Attachments

Refer to Figure 19-42 and 19-43 in *Dental Assisting: A Comprehensive Approach 3e*

1. High-speed handpiece
2. Prophy angle
3. Chuck
4. Rheostat
5. Straight

Double Color-coding

Procedure

Treatment room

Operator—dentist/hygienist

Different set of the same instruments for the same procedure

Triple Color-coding

Triple color-coding is used in larger dental offices, where one or more dentists and several hygienists work.

Triple color-coding can designate the procedure, treatment room/operator, and individual set of instruments.

Color-coding for Procedure Sequence

Benefits for procedure color coding:

Indicating the sequence of a procedure allows the procedure to move faster

Makes setting up trays easier for new auxillary, interns, and temporary assistants

Chapter 8: Anesthesia and Sedation

Types of Anesthetic Injections

Refer to Figure Figures 20-3, 20-4, and 20-5 in *Dental Assisting: A Comprehensive Approach 3e*

Local infiltration

Field block anesthesia

Nerve block anesthesia

The nerve block anesthesia is the injection that is close to a main nerve trunk.

The local infiltration places anesthetic solution into the tissues near the small terminal nerve branches.

Maxillary Arch Injections and Site Locations

Refer to Figure 20-6 in *Dental Assisting: A Comprehensive Approach 3e*

1. E
2. A
3. D
4. B
5. F
6. C

Mandibular Arch Injections and Site Locations

Refer to Figure 20-7 in *Dental Assisting: A Comprehensive Approach 3e*

1. Buccal nerve block
2. Incisive nerve block
3. Inferior alveolar nerve block
4. Lingual nerve block

5. Mental nerve block
1. Inferior alveolar nerve block
2. Incisive nerve block and mental nerve block
3. Buccal, lingual, and inferior alveolar nerve block

Aspirating Syringe

Refer to Figure 20-8 in *Dental Assisting: A Comprehensive Approach 3e*

Plunger is another name for a piston rod.

- A. False statement

Needle Parts

Refer to Figure 20-9 in *Dental Assisting: A Comprehensive Approach 3e*

1. B. a long needle is used for a block injection
2. A. toward the tissues/bone
3. C. either metal or plastic

Parts of an Anesthetic Cartridge

Refer to Figure 20-11A in *Dental Assisting: A Comprehensive Approach 3e*

- Aluminum cap
- Glass cylinder
- Neck
- Rubber diaphragm
- Rubber stopper

Four things to look for before using an anesthetic syringe:

- Expired shelf-life dates
- Large bubbles
- Extruded plungers
- Corrosion or rust around the aluminum cap

or cracks around the neck region and the rubber stopper area.

The diaphragm is located on the syringe end of the cartridge.

Information on the Anesthetic Cartridge

Refer to Figure 20-11B in *Dental Assisting: A Comprehensive Approach 3e*

Information found on the glass cylinder of an anesthetic syringe:

brand name, solution concentration, volume of anesthetic, vasoconstrictor ratio (if solution contains a vasoconstrictor), lot number and expiration date.

Mix and match:

1. C 2. A 3. D 4. B

Equipment and Supplies Needed to Prepare an Anesthetic Syringe

Refer to Figure 20-13 in *Dental Assisting: A Comprehensive Approach 3e*

Chapter 9: Dental X-Ray Film and Holding Devices

Electromagnetic Energy Spectrum and Applications

Refer to Figure 21-4 in *Dental Assisting: A Comprehensive Approach 3e*

Primary, Secondary and Leakage Radiation

Refer to Figure 21-5 in *Dental Assisting: A Comprehensive Approach 3e*

Mix and match:

1. C. red primary radiation
2. D. blue secondary radiation
3. A. yellow leakage radiation
4. B. green scatter radiation

Parts of Dental Arm Assembly

Refer to Figure 21-8 in *Dental Assisting: A Comprehensive Approach 3e*

1. Extension arm assembly
2. Tube head
3. Position indicator device
4. Control panel

Tube Head, PID, Vertical Indicator Scale

Refer to Figure 21-8B in *Dental Assisting: A Comprehensive Approach 3e*

E	Y	A	U	R	S	X	T	B
S	T	X	Y	A	B	R	U	E
U	R	B	T	E	X	A	Y	S
X	E	R	S	U	T	B	A	Y
A	U	T	B	Y	E	S	X	R
Y	B	S	R	X	A	U	E	T
B	A	Y	X	T	R	E	S	U
T	S	E	A	B	U	Y	R	X
R	X	U	E	S	Y	T	B	A

Tube Head and X-Ray Tube

Refer to Figure 21-12 in *Dental Assisting: A Comprehensive Approach 3e*

1. Cathode
2. Anode
3. Cathode
4. Anode
5. Anode

X-ray Tube

1. Diaphragm
2. Central beam
3. Focal spot

Composition of Dental X-ray Film

Refer to Figure 21-13 in *Dental Assisting: A Comprehensive Approach 3e*

1. 0.2 mm
2. Bluish
3. Cellulose acetate

Sizes of Dental X-ray Film

Refer to Figure 21-14 in *Dental Assisting: A Comprehensive Approach 3e*

Label the film sizes and color on the illustration

Mix and match:

- | | |
|---------------------------|----------|
| adult size | C. No. 2 |
| long bite-wing film size | D. No. 3 |
| child size | A. No. 0 |
| occlusal film size | E. No. 4 |
| narrow anterior film size | B. No. 1 |

Film Packet

Refer to Figure 21-5 in *Dental Assisting: A Comprehensive Approach 3e*

Label the parts of the film packet: Outer package and black paper, dental film, black paper, lead foil backing, outer package.

True or false:

- T Film packets come in double films.
- F Film packets come in triple films.
- T Package color and numbering may differ from one manufacturer to another.
- F Dental film can be stored at high temperatures.
- T Dental film can be stored in the refrigerator.

Film Holding Devices

Refer to Figure 22-10 in *Dental Assisting: A Comprehensive Approach 3e*

The abbreviation PID stands for position indicator device.

Identify some of the film holding devices that are available: RINN, Snap-a-ray.

Rinn XCP

Refer to Figure 22-11 in *Dental Assisting: A Comprehensive Approach 3e*

Processing Room

Refer to Figure 22-34 in *Dental Assisting: A Comprehensive Approach 3e*

1. Stainless steel
2. Additional water after development
3. Silver

Manual Processing Tank

Refer to Figure 22-33B in *Dental Assisting: A Comprehensive Approach 3e*

1. Developer
2. 68 degrees–70 degrees Fahrenheit
3. Higher

Chapter 10: Radiology Landmarks

Landmark Planes for Exposing Radiographs of the Face

Refer to Figure 23-10 in *Dental Assisting: A Comprehensive Approach 3e*

1. Ala of the nose (flared side of nostril) to tragus of the ear (center of the ear)
2. Bridge of the nose just below the eye to the middle of the ear (tragus)
3. Mandibular arch
4. Maxillary arch

Landmarks for the Tooth and Surrounding Tissues

Refer to Figure 23-22 in *Dental Assisting: A Comprehensive Approach 3e*

1. D
2. B

Landmarks for the Surrounding Tissues

Refer to Figure 23-24B and 23-23B in *Dental Assisting: A Comprehensive Approach 3e*

Mix and match:

1. C
2. A
3. D
4. B

Landmarks for the Maxillary Arch

Refer to Figure 23-24 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. B
3. A

Landmarks for the Mandibular Arch

Refer to Figure 10-5 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. D

Parts of the mandible:

- Condyle process
- Coronoid process
- Border of the mandible
- Symphysis
- Medial sigmoid notch
- Ramus
- Mental foramen
- Mandibular canal
- Mandibular foramen
- External oblique ridge
- Angle of the mandible

Chapter 11: Miscellaneous

Maslow's Hierarchy of Needs

Refer to Figure 2-6 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. A
3. D
4. E
5. B

Food Guide Pyramid

Refer to Figure 5-2 in *Dental Assisting: A Comprehensive Approach 3e*

1. Fats, oils, and sweets
2. Bread, cereal, rice, and pasta
3. Fruit
4. Milk, yogurt, and cheese
5. Meat, poultry, fish, dry beans, eggs, and nuts

Sterilizers

Refer to Figure 11-17, 11-18, 11-19, and 11-20 in *Dental Assisting: A Comprehensive Approach 3e*

True or false:

- F Steam sterilizers do not need to have biological testing done.
- F The most rapid sterilization is done in an ethylene oxide sterilization system.
- F Liquid chemical sterilization is very easily monitored.
- T Ventilation is required for chemical vapor sterilization.

Biological Monitors, Process Indicators, and Dosage Indicators

Refer to Figure 11-22 in *Dental Assisting: A Comprehensive Approach 3e*

1. C
2. B
3. A

National Fire Protection Association's Color and Number System

Refer to Figure 12-12 in *Dental Assisting: A Comprehensive Approach 3e*